

# Punjab National Bank



## REQUEST FOR PROPOSAL (RFP) FOR WEB BASED APPLICATION FOR FOREX OPERATIONS

Information Technology Division  
I.T Procurement Department  
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## DISCLAIMER

The information contained in this Request for Proposal Document (RFP Document) or subsequently provided to Bidder/s, whether verbally or in documentary form by or on behalf of the Punjab National Bank or any of their representatives, employees or advisors (collectively referred to as — Bank Representatives), is provided to Bidder(s) on the terms and conditions set out in this RFP Document and any other terms and conditions subject to which such information is provided.

This RFP Document is not an agreement and is not an offer or invitation by the Bank Representatives to any party other than the entities who are qualified to submit their Proposal (Bidders). The purpose of this RFP Document is to provide the Bidder with information to assist the formulation of their Proposal. This RFP Document does not purport to contain all the information each Bidder may require. This RFP Document may not be appropriate for all persons, and it is not possible for the Bank Representatives, their employees or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this RFP Document. Each Bidder should conduct their own investigations and analysis and should check the accuracy, reliability and completeness of the information in this RFP Document and wherever necessary, obtain independent advice from appropriate sources. The Bank Representatives, their employees and advisors make no representation or warranty and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of the RFP Document.

The Bank Representatives may in their absolute discretion, but without being under any obligation to do so, update, amend or supplement the information in this RFP Document.

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# I **GENERAL TENDER DETAIL**

SUPPLY OF WEB BASED APPLICATION FOR FOREX OPERATIONS		
1.	Date of commencement of Bidding Process.	15/05/2015
2.	Last date and time for sale of Bidding Documents	11/06/2015 : 16:00hrs
3.	Last date and time for receipt of queries from vendors for Clarifications	28/05/2015 : 17:00hrs
4.	Pre-Bid meeting	01/06/2015 : 11:00hrs
5.	Last date and time for sale of Bidding Documents	11/06/2015 : 16:00hrs
6.	Last date and time for Hash submission	11/06/2015 : 16:00hrs
7.	Last date and time for online bid submission	12/06/2015 : 14:00hrs
8.	Date and Time of Technical Bid Opening	Please refer Tender Schedule
9.	Place of opening of Bids	Punjab National Bank, Information Technology Division, Head Office,5- SansadMarg, New Delhi - 1
10.	Address for communication	As above Tel:(011) 23311452 /23718045 Fax:(011) 23321305
11.	Cost of RFP	Rs.10000/- (Non refundable) should be submitted online only in favour of Punjab National Bank on or before last date of bid submission in the following account:  IFSC Code : PUNB0015300 Bank & Branch : Punjab National Bank, Sansad Marg, New Delhi -110001 Account No.: <b>0153002200175673</b> ( 16 digits) Imprest account – HO IT Division
12.	Earnest Money Deposit (EMD)	Rs.10,00,000/- (Rs. Ten Lacs Only) should be submitted online on or before last date and time of bid submission or in the form of Bank Guarantee (as per specified Performa, Annexure (XIV) in favour of Punjab National Bank, IT Division at New Delhi. BG should be valid for a period of 6 Months from the date of submission of bid.  IFSC Code : PUNB0015300 Bank & Branch : Punjab National Bank, Sansad Marg, New Delhi -110001 Account No.: <b>0153002100567220</b> ( 16 digits) Imprest account – HO IT Division.  In case of unsuccessful bidder, EMD will be returned after completion of the bid process and no interest will be payable of EMD amount.
13.	Contact to Bidders	Interested Bidders are requested to send the e-mail to <a href="mailto:itdhw@pnb.co.in">itdhw@pnb.co.in</a> ; <a href="mailto:mkm@pnb.co.in">mkm@pnb.co.in</a> ; and

		<u>sateesh@pnb.co.in;</u> <u>lalaswani@pnb.co.in;</u> <u>navisvictoria@pnb.co.in</u> for clarification containing following information, so that in case of any clarification same may be conveyed to them. Name of company, contact person, mailing address with Pin Code, Telephone No., Fax No., e-mail address, Mobile No. etc.
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**Note:**

- 1) Technical Bids will be opened online and technical supporting document will be opened in physical form but Commercial bid will be opened online only. Bidders may view the details through their terminal using their e-procurement [<https://pnbindia.biz>] registration login.
- 2) Only technical supporting documents should be given in physical form only. However, Commercial Bid should be submitted only online in our e-procurement system.

## **INTRODUCTON**

### **PUNJAB NATIONAL BANK**

Punjab National Bank is one of the largest public sector banks with more than 6750 Branches/Offices geographically located across India. The Bank is fully computerized and networked in order to achieve the effective and efficient customer services to more than Nine Crore customers with global business of more than Rs. 850000 cores.

Today's banking is a technology enabled service industry. Banking facilities are enabled through multiple delivery channels i.e. Branches, ATMs, Internet Banking, Mobile Banking, Call Centre, Kiosks, Corporate Websites and Social Networking Sites. Banks have made huge investments in creating technical infrastructure for providing world class facilities to their esteemed customers.

Punjab National Bank is the front runner in adoption of IT & ICT enabled initiatives in providing new age technology driven banking services to its customers. PNB has always looked at technology as a key facilitator to provide better customer service and ensured that its 'IT strategy' follows the 'Business strategy' so as to arrive at "Best Fit". The Bank has made rapid strides in this direction. Anytime Anywhere banking facility to all the customers. The Bank has also been offering Internet banking services to its customers which also enables on line booking of rail tickets, payment of utilities bills, purchase of airline tickets, etc. Towards developing a cost effective alternative channels of delivery, the Bank with more than 8300 ATMs and it is one of the largest ATM network amongst the nationalized banks.

## **2. BACKGROUND AND PURPOSE OF THE PROJECT**

Punjab National Bank (hereinafter referred to as the Bank) with Head Office at New Delhi and its Treasury Division at Mumbai is interested in implementing software solution for FOREX Operations of Treasury.

Our FOREX Operations is centralized at Treasury and we are maintaining 37 NOSTRO accounts for smooth functioning of FOREX transactions. All over India, our 188 branches are authorized for handling the FOREX business.

Our daily transactions pertaining to merchant deals is around 2500 with volume of approx Rs. 800 Cr approx and the interbank transactions are around 1000 per day with volume between Rs. 5000 - Rs. 6000 Cr.

### Current Status of Treasury Management System in the Bank:

The Bank has implemented Finacle as its Core Banking System from M/s. Infosys across all the domestic and overseas branches. Domestic treasury operations of the bank are being handled by KONDOR from M/s. Misys.

### FOREX Operations are being handled by three different systems as follows:

KONDOR from M/s Misys is being used for interbank FOREX transactions at front office level.

RETAD from M/s. Thomson Reuters for Merchant transaction reporting system of branches.

EBT (Enterprise Banking treasury) – Back office solution from M/s. Saksoft for all FOREX transactions.

### **PRESENT SETUP:**

Merchant deals are entered by the branch in RET-AD (Reuters Electronic Trading application and after the rates are given by dealers at treasury, the deals flow to KPLUS application. From KPLUS the deals flow to EBT (Enterprise Banking Treasury) – FOREX Back office application for further processing, authorization and MIS generation.

Interbank deals are entered by the dealers directly into KPLUS and after which they flow to EBT for back office authorization. Accounting and settlement of all foreign exchange transactions happen through EBT and the software is used by us since 2003.

### Details of the EBT system:

Architecture	: Client-Server Architecture
Front-End	: Power Builder
Database	: Oracle 10g
Hardware	: Sun Server

The Software was purchased from M/s. Saksoft and was implemented in 2003. The system is catering to accounting and settlement of all FOREX Operations. EBT system is interfaced with RETAD and KONDOR for smooth deal flow from front office and for further processing at the back office.

## **Proposed System**

The proposed solution needs to a web based solution taking care of FOREX operations of the bank. The proposed solution needs to be interfaced with RET-AD which is the Merchant transaction reporting system for branches. However the system should be flexible enough to handle merchant transaction reporting functionality.(Bank may use this feature in future replacing RET-AD)

The proposed FOREX software solution is required to be end to end (which means the solution should handle the front office & back office operations of FOREX transactions), to be used in Treasury department using preferably the latest version of application, database and its tool. The solution shall take care of the Front office and Back Office operations of FOREX transactions. The purpose behind this document is to get proposal to identify the vendor for meeting all the functional requirements of treasury operations with the ability to perform day to day FOREX operations and to have interface with CBS, RET-AD, KPLUS and other external systems through Straight Through Processing (STP) without manual intervention.

Further, Forex system should be designed with robustness, to include future expansion and scalability with constant growth of business requirements of the bank. The number of Deals per day in FX Treasury is about 4000 deals/ day including merchant and interbank and expected to grow by 10-15% per year during the project period of next 5 years. The system requirements with hardware configuration need to be suggested for implementing the proposed system. However the Bank reserves the right to purchase the hardware / System / Operating System/Environment software licenses from the selected vendor or to procure / or to use the same already available with the bank.

The main site will be at Mumbai with its production servers to be placed at DRS, Belapur, Navi Mumbai. The Disaster Recovery site should be established at Data Centre, HO: ITD, New Delhi.

The proposed system should be in a position to supply the data to the Bank's Data Ware House at a pre-determined interval.

The proposal will be for a complete end to end solution for FOREX management system with the following components:-

1. FOREX Front office and Back Office Solution
2. Application/ environment Software
3. Interface with external systems including CBS, RET-AD, KPLUS, MGR, MLS, EDW, CCIL, CLS & SWIFT etc
4. Cost of onsite support.



5. Generation of periodic messages of MT103, MT102, MT300, SW203, SW300 etc.
6. Ancillary Services (existing data migration, documentation, training, etc.)

Price should be quoted separately for all the items and with required configuration details for calculating/ arriving at the total cost of ownership.

## **PURPOSE OF THE RFP**

- Purpose of RFP is to solicit proposals from qualified bidders for providing solution & services for implementation of web based software for FOREX Operations of Treasury for PNB. Technical and commercial bids are invited from bidders to install and maintain the software for Web Based Application for Forex Operations as per the terms and conditions mentioned hereunder.
- Bank desires to procure a new web based software for FOREX Operations, an end to end solution as per the market standards addressing all RBI requirements as well as satisfying all our technical requirements and functional requirements detailed below

## **2. ELIGIBILITY CRITERIA**

- 2.1. The bidder company should be registered in INDIA as per the companies act or have its registered office within the jurisdiction of INDIA.
- 2.2. The bidder's Support centre should be located at Mumbai. In case bidder is not having support centre at Mumbai, bidder should give undertaking to open the support centre in Mumbai within 1 month of award of tender.
- 2.3. The bidder should be engaged in providing/implementing such software solution in India for last 3 years.
- 2.4. The turnover of bidder / parent company of the bidder for the last three financial years must be not less than Rs.15 Crore, during each year. Audited Financial Statements of last 3 years should be submitted in this regard.
- 2.5. The bidder should have shown positive net worth as per last audited balance sheet.
- 2.6. All the mandatory fields in the functional requirements as per Annexure-VIII should have been implemented and live in at least two Scheduled Bank.
- 2.7. The bidder should not be involved in any litigation which threatens solvency of company and undertaking in this regard is to be submitted by bidder.
- 2.8. The solution provider company should be CMMI (Capability Maturity Model Integration) level 3 complied. In case the solution provider company is not CMMI 3 compliant then the solution to be provided should be accompanied by a certificate from the CMMI level 5 company confirming after evaluation/audit that the solution provided is in conformity with CMMI 3 standards.

- 2.9. Bidder should be the owner of the software solution offered or should have exclusive right of use/deploy the software in India.
- 2.10. The bidder has IP (Intellectual property) rights for the products offered to Punjab National Bank and an undertaking to this effect to be given.
- 2.11. The solution provider should also comply with the Information Security standards as per ISO 27000 series as applicable for the implementation.

The documentary proofs for qualifying the prequalification criteria should be submitted along with the technical bid. In case a bidder fails to provide the same the bid would be summarily rejected.

### **3. SCOPE OF WORK**

The system should be capable of providing the functionalities as described in Annexure – VIII. A brief overview of the requirement is outlined below and it is mandatory for the bidder to submit its response/undertaking of compliance on the following.

Note: All requirements mentioned hereunder should be complied by the bidder failing which it may lead to the rejection of the bid.

- 3.1. Bidder to provide the proposed end-to-end web based solution for FOREX operations meeting the features and functionalities mentioned in the RFP as per Annexure-VIII.
- 3.2. Bank is looking for a complete end-to-end solution for Implementation of FOREX Management System. The proposal should include hardware configuration, software license requirement, Implementation, Customization, Integration, Migration, Testing, Training, Onsite Support and maintenance of all necessary Software, RDBMS and other utilities.
- 3.3. The system should be scalable to support additional users and modules.
- 3.4. The system requirements with hardware configuration need to be suggested for implementing the proposed system.
- 3.5. The product should have built-in features for providing role based access to users of the Bank.
- 3.6. After UAT and before the date of live implementation\* of the software solution, the product will be audited by Bank's appointed third party Software Audit firm/in house team. All audit points raised by the Software Auditor in Audit should be complied by the selected bidder without any extra cost to the bank and within the stipulated time frame mutually decided between the Bank and the selected bidder.
- 3.7. The solution should have built in security features to help only authorized users to use the application as per roles defined. Open Web Application

Security Project (OWASP) guidelines are followed and complied by the bidder.

- 3.8. Integrate the proposed solution with Bank's Core Banking Solution Domestic and foreign branches, Subsidiary with necessary interface
- 3.9. Proposed Solution should also provide interface with RETAD, CBS, EDW, KPLUS, MGR, MLS, CCIL, CLS, SWIFT etc
- 3.10. Customization of the proposed solution to meet the Bank's Functional, Operational, Risk Management and MIS requirements of Treasury with all required interfaces
- 3.11. Ability to scale up the services at multiple centres in India and overseas
- 3.12. The proposed solution should cater to the needs of our Statutory and Regulatory requirements of present and immediate future of the Bank
- 3.13. The product shall be under a warranty of minimum one year from the date of live implementation\* during which additions/modifications/bug fixing shall be done without any extra charge. Further all upgrades, patches would be provided free of cost during the warranty and support period. The warranty period would start on live implementation\*.
- 3.14. All statutory changes will be incorporated in the software by the bidder during warranty and subsequent support period free of cost.
- 3.15. The successful bidder shall be responsible to provide Annual Technical Support of the product. The cost quoted by the bidder for the Annual Technical Support in the commercial bid will be valid for 4 years after the warranty period. The bidder should be able to provide support of the application for its lifetime. Lifetime means time up to which bank will be using the application.
- 3.16. The solution provider should provide workflow templates/ process flow documents to facilitate bank users to easily customize it according to its needs where there is no change in the business logic.
- 3.17. The shortlisted bidder should provide 12 months on site support for minimum duration of 11.30 a.m. to till day end operations., Monday to Friday, and offsite 24 x 7 support during warranty period, immediately after live implementation\* without any extra cost. After completion of one year onsite support during warranty, it is Bank's discretion to take onsite support from selected bidder.
- 3.18. The bidder will be required to implement the solution at Disaster Recovery (DR) site of the Bank as required by the Bank. No separate License fee and implementation cost would be payable to the bidder for DR implementation.

- 3.19. The bidder should ensure full time availability of minimum one Subject Matter Expert onsite from 'Selected bidder/ PSP' for the period of Implementation. Subject Matter Expert will bring in his experience in the iterative process of framing business rules and to bringing process changes, review all project deliverables.
- 3.20. The bidder should provide details of the Hardware & Software platform required for deploying the proposed solution as per Annexure-XI.
- 3.21. Solution should have clear separation between design and deployment activities.
- 3.22. The Bidder has to provide complete document on Business continuity plan (BCP) and Disaster Recovery Plan (DRP) of the proposed solution.
- 3.23. The bidder should provide a project implementation plan indicating milestones and deliverables. Initially deliverables will be Design document, technical architecture of the solution and action plan for implementation.
- 3.24. The Bidder should provide User Manual of the application software in hard and soft copy along with implementation of the software.
- 3.25. The bidder shall arrange for training as defined in Clause 6 Training of the RFP.
- 3.26. The proposed solution should maintain history of all additions, modifications, deletions and parameter changes etc. as Audit Trails.
- 3.27. Ability to rapidly generate ad-hoc reports with an easy to use report writing Tool / wizard.
- 3.28. The proposed solution should provide for Maker and Checker concept for transaction processing and authorization. Solution should also provide for a workflow to facilitate various levels of authorization.
- 3.29. Providing application maintenance for error fix, patch management, upgradation, additions / modifications in the application to cater changes to data sources and /or new reporting requirements during warranty period of one year as well as during the post warranty period.
- 3.30. The bidder should study the requirements of the bank including customization and provide a Systems Requirement Study (SRS) report to the bank.
- 3.31. The bidder should either provide the source code itself with necessary documentation or arrange to keep it under escrow arrangement.
- 3.32. The bidder will be required to implement all three environments for the solution i.e. Production, DR, Development/ Test.

- 3.33. The primary site will be at Mumbai with its production servers to be placed at DRS, Belapur, Navi Mumbai. The Disaster Recovery site should be established at Data Centre, HO: ITD, New Delhi.
- 3.34. Duties of onsite engineer includes configuration changes, version upgradations, performance monitoring, trouble shooting, Bug Fixing, patch installation and liaison with Bank official for various support issues etc. and assist Bank official in switching to the DR site in case of system failure and Conduct DR drills in conjunction with the Bank.
- 3.35. Solution should support all industry specific standard format i.e. ISO 20022, ISO 8583, SWIFT messaging formats.
- 3.36. System should support RBI's directives and guidelines pertaining to FOREX Management issued time to time without any additional cost to the bank.
- 3.37. The proposed solution should provide audit reports and Tools for the Bank's internal/concurrent/statutory/SEBI/CCIL/IDRBT/RBI audit/inspections etc.
- 3.38. The vendor has the sole responsibility of migrating the complete data from EBT to the proposed solution.
- 3.39. The solution should support DR with proper real time replication.
- 3.40. Closure of all VAPT/ EAPT / IS AUDIT observations pertaining to the proposed solution within time frame stipulated by Bank without any additional cost to the Bank. The observations may be made at any frequency by the bank or bank appointed external system audit team.

\*Live implementation is defined as customization & implementation of all modules as per Annexure-D after successful implementation at defined locations i.e. Treasury, Mumbai of PNB.

#### **4. OTHER CONDITIONS**

- 4.1. The entire activity under this facility would be guided by and conform to guidelines of PNB, government agencies, legal provisions etc if any.
- 4.2. Selected bidder will be responsible for managing the actions and activities of its personnel or the personnel of its subcontractors, etc involved in the project and will be accountable for all the personnel deployed/engaged in the project.
- 4.3. The project implementation plan will be monitored regularly and delay in achieving milestones and deliverables will be analyzed and corrective action has to be taken

- 4.4. No right to employment in the Bank shall accrue or arise, at any point of time under this project.
- 4.5. In the event of exit of the Bidder from the project, all the records, confidential information and knowledge sharing, as would be required by the bank shall be handed over to the bank in form as prescribed by the Bank at the time of exit. For exit a prior six months' notice is required to be given by the bidder.
- 4.6. Bank also reserves the right to cancel the order/contract with one month's notice to the bidder and invoke the BG as penalty in case implementation is not done as per agreed milestone.
- 4.7. The Bank also reserves the right to inspect such installation/s while evaluating the Technical Bid.
- 4.8. At any stage of tender process, if it is found that bidder has entered wrong detail for getting benefit or getting extra marks in Technical part, then the Bank reserve the right to forfeit/invoke the EMD/Bank Guarantee submitted by that bidder.
- 4.9. In case the bidder is not the Principal Solution Provider (PSP), the bidder should put in place adequate support structure from the Principal Solution provider for overseeing and assisting in completing the implementation within the time frame. A letter of undertaking from the Principal Solution Provider has to be submitted along with the bid documents. A representative of the principal solution provider should support during the period of implementation and during warranty period.

## **5. REQUIREMENTS OF PACKAGE**

Detailed user requirements enclosed in Annexure-VIII. Applicant should submit their response in the prescribed format, as per Annexure-VIII and an undertaking of compliance of requirements Annexure-IV and Annexure-V of this document.

## **6. COST OF BIDDING**

The Bidder shall bear all the costs associated with the preparation and submission of its bid and Bank, will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

## **7. BIDDING DOCUMENT**

The Bidder is expected to examine all instructions, forms, terms and conditions in the Bidding Documents. Failure to furnish all information required by the Bidding Documents or submission of a bid not substantially responsive to the Bidding Documents in every respect will be at the Bidders' risk and may result in the rejection of its bid without any further reference to the bidder. Bidder should strictly submit the bid as per RFP failing which bid will be rejected as non-responsive.

## **8. AUTHENTICATION OF ERASURES/ OVERWRITING ETC.**

Any inter-lineation, erasures or overwriting shall be valid only if the person(s) signing the bid initial(s) them.

## **9. AMENDMENT OF BIDDING DOCUMENTS**

At any time prior to the last Date and Time for submission of bids, the Bank may, for any reason, modify the Bidding Documents through amendments at the sole discretion of the Bank. All amendments shall be uploaded on the Bank's websites ([www.pnbindia.in](http://www.pnbindia.in) and <https://pnbindia.biz>) and will be binding on all who are interested in bidding.

In order to provide prospective Bidders a reasonable time to take the amendment if any, into account in preparing their bid, the Bank may, at its discretion, extend the deadline for submission of bids.

## **10. CONTACTING PNB OR PUTTING OUTSIDE INFLUENCE**

Bidders are forbidden to contact PNB or its Consultants on any matter relating to this bid from the time of submission of commercial bid to the time the contract is awarded. Any effort on the part of the bidder to influence bid evaluation process, or contract award decision may result in the rejection of the bid. Bank's decision will be final and without prejudice and will be binding on all parties.

## **11. BANK'S RIGHT TO ACCEPT OR REJECT ANY BID OR ALL BIDS**

The purchaser reserves the right to accept or reject any bid and annul the bidding process or even reject all bids at any time prior to award of contract, without thereby incurring any liability to the affected bidder or bidders or without any obligation to inform the affected bidder or bidders about the grounds for the bank's action. The bank reserves the right to accept or reject any technology proposed by the bidder. The bank reserves the right to select more than one bidder keeping in view its large requirements.

## **12. MODIFICATION AND WITHDRAWAL**

Bids once submitted will be treated, as final and no further correspondence will be entertained on this. No bid will be allowed to be modified after the submission of bid. No bidder shall be allowed to withdraw the bid, if bidder happens to be successful bidder.

## **13. REVELATION OF PRICES**

The prices in any form or by any means should not be disclosed in the technical or other parts of the bid except in the commercial bid. Failure to do so will make the bid liable to be rejected.

## **14. TERMS AND CONDITIONS OF THE BIDDING FIRMS**

The bidding firms are not allowed to impose their own terms and conditions to the bid and if submitted will not be considered as forming part of their bids.

The bidders are advised to clearly specify the deviations, in case terms and conditions of the contract applicable to this invitation of tender are not acceptable to them.

## **15. LOCAL CONDITIONS**

The bidder must acquaint himself with the local conditions and factors, which may have any effect on the performance of the contract and / or the cost.

## **16. CLARIFICATIONS OF BIDS**

To assist in the examination, evaluation and comparison of bids the bank may, at its discretion, ask the bidder for clarification. The response should be in writing and no change in the price or substance of the bid shall be sought, offered or permitted.

## **17. BID EARNEST MONEY**

Bidder has to submit the Bid Earnest Money of Rs.20 Lakh either online before last date of bid submission or in the form of BG as per Annexure- XII for the period of 6 months favoring PUNJAB NATIONAL BANK, IT DIVISION payable at Delhi and filling all the details in the format available for the same in our e-procurement system at website <https://pnbindia.biz>. The EMD will be returned on completion of tender process and no interest will be payable on EMD amount. The bidders should claim the EMD within 6 months from the completion of tender process after which the bank is not liable to return the EMD.

Details for online payment:

IFSC Code: PUNB0015300

Bank & Branch: Punjab National Bank, Sansad Marg, New Delhi -110001

Account No. 0153002100567220 (16 digits) (Proof of the transaction (printout) to be submitted along with the bid documents).

Imprest account – HO IT Division

## **18. SUBMISSION OF BIDS**

The bidders shall duly complete the formats of Technical Bid (submit in system as well as hard copy) and Commercial Bid will be submitted only online through our e-Procurement System using their Digital Signature at website <https://pnbindia.biz>. The bid Submitted by the bidder using Digital Signature is binding the bidder to the contract.

## **19. DEADLINE FOR SUBMISSION OF BIDS**

Bids must be submitted not later than the specified date and time mentioned in the Bid Document. If specified date of submission of bids being declared a holiday for the Bank, the bids will be received up to the specified time in the next working day. The Bank may, at its discretion, extend this deadline for submission of bids by amending the bid documents, in which case all rights and obligations of the Bank and bidders, previously subject to the deadline, will thereafter be subject to the deadline extended. Physical bid will be submitted after showing the proof of online submission.

## **20. PERIOD OF VALIDITY OF BIDS**



Bid shall remain valid for 180 days from last date of submission of bid prescribed by PNB. A bid valid for shorter period is liable to be rejected by PNB. The bidders may be required to give consent for the extension of the period of validity of the bid, if so desired by PNB in writing. Refusal of such consent would not forfeit the Bid Security and granting of request will not allow the bidder to revise/ modify his bid.

## **21. LATE BIDS**

Any bid received by the Bank after the deadline for submission of bid will be rejected.

## **22. BID CURRENCY**

The Prices in the bid document shall be expressed in Indian Rupees (INR) only.

## **23. LANGUAGE OF BID**

The bids prepared by the bidder and all correspondence and document relating to the bids exchanged by the bidder and PNB, shall be written in English.

## **24. OPENING OF BIDS**

All the bids will be opened at the date, time and locations mentioned in RFP (as per tender schedule). The technical bids will be opened in the presence of representatives of the bidders who choose to attend.

The bidders names, modifications, bid withdrawal and the presence or absence of requisite Bid Security and such other details, as PNB at their discretion, may consider appropriate will be announced at the bid opening.

## **25. PRELIMINARY EXAMINATION**

The Bank will examine the bids to determine whether documentations are complete, whether any computational errors have been made, whether required information has been provided as underlined in the bid document, whether the documents have been properly signed, and whether bids are generally in order.

The bid determined as not in order as per the specifications will be rejected by the Bank.

## **26. BIDDING PROCESS (TWO STAGES)**

For the purpose of the present job, a two-stage bidding process will be followed. The response to the present tender will be submitted in two parts:

- Technical bid (Stage-I)
- Commercial bid (Stage-II)

The bidders will have to submit the technical bid in banks e-procurement system as well as in hard copy and commercial bids in only online form through bank's e-procurement system.

**i) TECHNICAL BID (Stage I)**

TECHNICAL BID will contain the Compliance statement as per the Terms & Conditions mentioned in the RFP, and NOT contain any pricing or commercial information at all. Technical bid documents with any commercial information will be rejected.

In the first stage, only TECHNICAL BIDs will be opened and evaluated. Only those bidders confirming compliance to all the terms & conditions of RFP document shall be short-listed for commercial stage.

**ii) COMMERCIAL BID (Stage II)**

In the second stage, the COMMERCIAL BID of only those bidders, whose technical bids are short listed, will be opened.

**27.EVALUATION AND AWARD CRITERIA**

After opening of the technical bids, all the documents and annexure (except commercial documents/offer) will be evaluated first by the bank. First, received bids will be evaluated based on the eligibility criteria. Technical bids of only those bidders satisfying the eligibility criteria will be evaluated.

Only those bidders satisfying the technical requirements and accepting the terms and conditions of this document shall be short-listed for further steps.

Technically qualified and successful bidders may be called to make presentation of the solution offered by them as per the schedule decided by PNB.

It may be noted that commercial bids will be subjected to following evaluation process:

Only those bidders scoring 70% (70 marks out of 100) or above in the technical evaluation will be only eligible to participate in the next stage of the bidding process (i.e.) commercial evaluation

The commercial bids for only those bidders will be opened who have qualified on the basis of technical evaluation and reviewed to determine whether the commercial bids are substantially responsive. Commercial bids that are not substantially responsive are liable to be disqualified at PNB's discretion.

The L1 price for the awarded contract will be decided as per reverse auction

**28. VERIFICATION OF REFERENCE INSTALLATIONS**

PNB may, if deemed necessary, conduct verification of reference installation to satisfy themselves on the performance of the equipment / services offered with reference to their requirements.

**29. CANCELLATION OF BID/ BIDDING PROCESS**

PNB reserves the right to accept or reject any bid and annul the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability

to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the ground for its action.

### **30. REVERSE AUCTION**

Bank may hold Reverse Auction in the event of 2 or more bidders as technically eligible. The procedure for the same is available on our e-procurement website. It will be mandatory for all the bidders to quote rates of all optional components that may be required.

### **31. PRICE VARIATION FACTOR**

“If a bidder quoting higher prices, higher by more than 40% as compared to the average quoted prices (of all technically qualified bidders) for all items in aggregate, the same bidder shall not be called for reverse auction process”.

### **32. CONTACTING PNB OR PUTTING OUTSIDE INFLUENCE**

Bidders are forbidden to contact PNB or its Consultants on any matter relating to this bid from the time of submission of commercial bid to the time the contract is awarded. Any effort on the part of the bidder to influence bid evaluation process, or contract award decision may result in the rejection of the bid.

### **33. VERIFICATION OF REFERENCE INSTALLATIONS**

PNB may, if deemed necessary, conduct verification of reference installation to satisfy themselves on the performance of the equipment / services offered with reference to their requirements.

### **34. CANCELLATION OF BID/ BIDDING PROCESS**

PNB reserves the right to accept or reject any bid and annul the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the ground for its action.

### **35. NON DISCLOSURE**

By virtue of Contract, as and when it is entered into between the Bank and the successful bidder, and its implementation thereof, the Successful Bidder may have access to the Confidential Information and data of the Bank and its customers. The Successful Bidder will enter into a Non-Disclosure Agreement to maintain the secrecy of Bank's data as per following:

- That the Successful Bidder will treat the Information as confidential and shall not disclose to any third party. The Successful Bidder will also agree that its employees, agents, sub-contractors shall maintain Confidentiality of the Confidential Information.

- That the Successful Bidder will agree that it shall neither use, nor reproduce for use in any way, any Confidential Information of the Bank without consent of the Bank. That the Successful Bidder will also agree to protect the Confidential Information of the Bank with at least the same standard of care and procedures used by them to protect its own confidential Information of similar importance. Without limitation of the foregoing, the Successful Bidder shall use reasonable efforts to advise the Bank immediately in the event that the Successful Bidder learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of the Contract to be entered into between the Bank and the Successful Bidder, and will reasonably cooperate in seeking injunctive relief against any such person.
- That if the Successful Bidder hires another person to assist it in the performance of its obligations under the Contract, or assigns any portion of its rights or delegates any portion of its responsibilities or obligations under the Contract to another person, it shall cause its assignee or delegate to be bound to retain the confidentiality of the Confidential Information in the same manner as the Vendor is bound to maintain the confidentiality. This Clause will remain valid even after the termination or expiry of this agreement
- That the Successful Bidder will strictly maintain the secrecy of Bank's data.

### **36. CONTENT OF DOCUMENTS TO BE SUBMITTED**

Documents required in Technical Bid Envelope (Sealed Cover):

- i. Supporting documents in respect of Pre qualification criteria(Annexure-A)
- ii. Bidder's information as per part "I" of Annexure-III.
- iii. Product Information as per part "II" of Annexure –IV.
- iv. Technical Features & Architecture of the System as per part "III" of Annexure - V.
- v. Acceptance of Compliance Statement Annexure –VII.
- vi. Functional Requirement as per Annexure – VIII.
- vii. Components required for system (Software/Hardware/DBMS / Network Bandwidth/Software Utilities / Middleware etc, including Licenses, AMC and ATS wherever required)
- viii. Any other document indicating the feature of the product.
- ix. Proposed Hardware Specification for the solution as per the Annexure-XI.
- x. Copy of last three years audited balanced sheet.
- xi. Bid Earnest Money in the form of Demand Draft/BG as per Annexure –X. Please mention the tender name with year and company name at the back of DD.
- xii. Power of attorney along with Board resolution in favour of authorized person signing the Bid documents.

- xiii. Commitment certificate for service support duly signed by the Company Secretary.
- xiv. Letter of Undertaking from Principal Solution Provider is to be submitted regarding providing adequate support for overseeing and assisting in completing the implementation as stated in point 'h' under Clause 4 i.e. Other conditions.

Note: a. All pages of the bid documents must be signed by authorized person.  
b. All pages of the bid documents should be numbered in serial order i.e. 1, 2, 3...  
c. Annexure- VIII to be submitted in e-procurement process only. No hardcopy of the same be enclosed with the supporting documents.

## **ANNEXURE – I**

### **TERMS AND CONDITIONS**

#### **1. ACCEPTANCE OF ORDER**

The bidder shall give acceptance within 7 days from the date of order. However, Bank has a right to cancel the order, if the same is not accepted within the stipulated period from the date of the order.

#### **2. SIGNING OF CONTRACT**

The successful bidder(s) shall be required to enter into a Service Level Agreement (SLA) and Non Disclosure Agreement (NDA) with PNB, within 30 days of the award of the tender or within such extended period as may be permitted by the bank on the basis of the Tender Document, the Tender of the successful bidder, the letter of acceptance and such other terms and conditions as may be determined by the Bank to be necessary for the due performance of the work in accordance with the Bid and the acceptance thereof, with terms and conditions shall be contained in a Memorandum of Understanding to be signed at the time of execution of the Form of Contract.

#### **3. PERFORMANCE BANK GUARANTEE**

The successful bidder has to submit the Performance Bank Guarantee of 20% of the "order cost to selected bidder" within 15 days of award of contract, valid up to 2 years. Before the expiry of this PBG selected bidder has to provide the PBG of 20% of ATS cost valid up to the ATS period.

#### **4. WARRANTY**

The solution should have a comprehensive on-site warranty of one year after live implementation of software applications. Warranty should cover trouble shooting, removing bugs/errors and enhancement (if required). There will be no charges for additional customization during warranty. All upgrades / updates / new version releases

will be provided during warranty period with no extra cost to bank. During implementation phase if any upgrades / updates / new version releases comes, it should be implemented at no extra cost to bank. Bidders will ensure smooth functioning of the package for the first 12 months by deputing one on-site support engineer at bank's identified site from 11.30 a.m. to till day end opeations. Monday to Friday, for which a separate SLA will be executed between Bank and selected bidder . The onsite resource must be having an experience of atleast 2 years in the same product. The bidder shall also ensure the requisite knowledge transfer to the identified staff of the Bank for maintenance of the system subsequent to the initial on-site support period of 12 months.

## **5. ANNUAL TECHNICAL SUPPORT**

ATS will start after completion of warranty period. ATS should cover trouble shooting, removing bugs/errors. All upgrades / updates / new version releases will be provided during ATS period at no extra cost to bank. Bidders will ensure smooth functioning of the software package during ATS through off-site/ onsite (as per requirement of the bank) support on 24\*7 basis. The shortlisted bidder should support for lifetime after completion of the warranty. Lifetime means time up to which bank will be using the application. Implementation charges (Onsite/ Offsite) for ATS related activity should be free of cost.

## **6. TRAINING**

The bidder has to provide the training free of cost at Mumbai. Training should be categorized into:

### **a. System Administration and Maintenance Training:**

It should include training in system administration, configuration, operation and management of application software. Trouble shooting, interpretation of error message, the linkage between various programs and modules of application software must be integral to this training. The number of this type of users to be trained will be 5-10.

### **b. End Users Training for branch level users:**

The operators will be comprehensively trained in all application operation tasks. Training will be provided in batches of 10 users. Total number of users to be trained will be 80.

### **c. End Users Training for senior officials:**

This will involve training of senior officials of bank in operation and management of application software. The number of this type of training will be 4 each of 1 day.

## **7. DOCUMENTATION**

Complete documentation of the application software in hard and soft copy should be provided along with implementation of the software. There will be separate manual for each documentation.

Documentation will include:

- Utilities reference manuals.
- Documentation on Design Logic and Program Development.
- Operator Reference manuals for each operator task.
- Error messages manuals.
- Documentation on troubleshooting.
- File / table structures, Indexes and Relations
- On line tutorials and help documentation.
- Data Dictionary
- Software Requirement Specification (SRS)

## 8. PAYMENT TERMS

The Payment will be made on the achievement of the milestones mentioned as under:

Milestone	License fee (%)	Implementation fee (%)
After SRS Sign-off from Bank	10%	--
Delivery of the software (as per finalized SRS) and User Acceptance Test sign off by the bank. Deploying the application on live setup for pilot run.	20%	--
After successful run of application for 1 month on pilot and Live sign off from Bank. (The definition of live implementation will be same as given in clause 3. of RFP).	60%	80%
After the warranty period or after bidder gives a Bank Guaranty of equivalent amount valid up to warranty period.	10%	20%

The AMC/ATS Cost (after warranty period) shall be paid at the end of each half year after the date of completion of warranty period, subject to satisfactory services rendered, till that date.

In case of delayed delivery or incomplete delivery, the date of receipt of the complete and final component as per the SRS shall be treated as delivery date.

## 9. TAXES

The Unit Cost should be exclusive of all Taxes. TDS as applicable will be deducted from the payments.

## 10. DELIVERY, IMPLEMENTATION SCHEDULE & PENALTY CLAUSE

#### **a) Delivery**

The final "Drafted SRS" should be submitted by the bidder within one month of acceptance of order, to the bank for vetting. After getting SRS Sign-Off from the bank, the required software product will be delivered to the bank within 3 months. Any delay in providing deliverables will attract penalty of 2% of product cost per week (maximum of 15% of product cost) for late delivery from agreed schedule. If the delay exceeds 2 months then Bank reserves the right to cancel the order, blacklist the company and recover any payment made by invoking the BG as penalty. Besides downloadable form, the software should also be provided in CD/DVD/Hard Disk.

#### **b) Implementation Schedule**

The shortlisted bidder should implement all the listed functionalities of the solution in live environment within 15 days from the date of the UAT Sign-off. Penalty is also applicable in case of delay in live implementation of the software product. 2% of the implementation cost will be deducted as penalty per week for delaying in implementation as per schedule, with a maximum of up to 10% of implementation cost.

#### **c) Penalty for delay in Annual Technical Support**

Resolution of the problem is expected within 24 hours of escalation by the Bank as per the support matrix provided by the Bidder. Delay in providing resolution will attract penalty at 2% of the ATS per week subject to a maximum of 20% of the ATS for the year. The bank reserves the right to terminate the contract after giving 30 days notice, in case the support is not satisfactory.

### **9. UPGRADES AND UPDATES**

The bidder shall be required to provide all future updates and upgrades for the solution provided free of cost. If however, the upgrades is not available then the support for the implemented solution should be available at any point of time. An undertaking to this effect is to be furnished by the Bidder.

### **10. GOVERNING LAW AND DISPUTES**

All disputes or differences whatsoever arising between the parties thereof shall be settled amicably. If, however, the parties are not able to solve them amicably, the same shall be settled by arbitration in accordance with The Arbitration and Conciliation Act 1996, and the award made in pursuance thereof shall be binding on the parties. The Arbitrator/Arbitrators shall give a reasoned award. Any appeal will be subject to the exclusive jurisdiction of courts at State of Delhi.

The bidder shall continue work under the Contract during the arbitration proceedings unless otherwise directed in writing by the Bank or unless the matter is such that the work cannot possibly be continued until the decision of the arbitrator, as the case may be, is obtained. The venue of the arbitration shall be State of Delhi.



## **11. PATENTS RIGHTS**

The supplier shall indemnify the bank against all third party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods, or any part thereof in India.

1. The supplier shall, at their own expense, defend and indemnify the Bank against all third party claims or infringement of intellectual Property Rights, including Patent, trademark, copyright, trade secret or industrial design rights arising from use of the products or any part thereof in India or abroad.
2. The supplier shall expeditiously extinguish any such claims and shall have full rights to defend it there from. If the Bank is required to pay compensation to a third party resulting from such infringement, the supplier shall be fully responsible for, including all expenses and court and legal fees.
3. The Bank will give notice to the Supplier of any such claim without delay, provide reasonable assistance to the Supplier in disposing of the claim, and shall at no time admit to any liability for or express any intent to settle the claim.

## **12. USE OF CONTRACT DOCUMENTS AND INFORMATION**

The bidder shall not, without the banks prior written consent, make use of any document or information provided by Supplier in Bid document or otherwise except for purposes of performing contract.

## **13. ASSIGNMENT**

The bidder shall not assign, in whole or in part, its obligations to perform under the contract, except with the Bank's prior written consent.

## **14. LIQUIDATED DAMAGES**

If supplier fails to deliver any or all goods or perform services within stipulated time schedule, the purchaser shall, without prejudice to its other remedies under the rate contract, deduct from the ordered price, as liquidated damages, a sum equivalent to 1% of the price for each week of delay until actual delivery of the goods or until the cancellation of order. The purchaser has right to cancel the order in case delivery/services not affected within stipulated time schedule. The purchaser is entitled to withhold (deduct) from the purchase price or any other amount, which is due to supplier from this contract, or any other contract. If vendor fails to deliver any or all goods or perform services within stipulated time schedule, the purchaser shall, without prejudice to its other remedies under the rate contract, deduct from the ordered price, as liquidated damages, a sum equivalent to 1% of the price for each week of delay until actual delivery of the goods or until the cancellation of order. The purchaser has right to cancel the order in case delivery/services not affected within

stipulated time schedule. The purchaser is entitled to withhold (deduct) from the purchase price or any other.

#### **15. INDEMNITY**

Bidder shall have to indemnify the Bank against any loss/expenditure incurred or any disputes/claims from anybody for having used/using patented design. Any patented design shall be under manufacturer's license agreements and a copy of such agreement authorizing the bidder to manufacture the patented designs shall be given to the Bank.

#### **16. FORCE MAJEURE**

Any failure or delay by vendor or Bank in performance of its obligations, to the extent due to any failure or delay caused by fire, flood, earthquake or similar elements of nature, or acts of God, war, terrorism, riots, civil disorders, rebellions or revolutions, acts of governmental authorities or other events beyond the reasonable control of non-performing Party, is not a default or a ground for termination. The affected Party shall notify the other party within reasonable time period of the occurrence of a Force Majeure Event.

#### **17. INTELLECTUAL PROPERTY RIGHTS**

The Bidder warrant that in the course of providing the services, they shall not infringe upon any third party Patent, Copyright, Design, Trademark, or any other Intellectual Property Rights for system software and application software. The Bidder shall indemnify and at all times keep the Bank fully indemnified and hold harmless against any and all loss, damages, costs and expenses including Attorney's fees, which may be incurred as a result of any claim or action associated with such infringement, PROVIDED HOWEVER, the Bank agrees to give prompt notice to the Bidder of any such claim or action, gives complete authority and freedom to the Bidder in defending and/or settling such claim and gives all reasonable assistance to the Bidder in doing so. The remedy available to the Bank under this clause will survive termination of the Purchase Order such that in the event of violation of IPR claim by any third party after the expiry of the contract between PNB and the Bidder, the indemnity clause listed above will be valid and applicable beyond the contract period.

#### **18. DELAYS IN THE SUPPLIER'S PERFORMANCE**

Delivery of the goods and performance of the Services shall be made by the supplier in accordance with the time schedule specified by bank. Any delay in performing the obligation by the supplier will result in imposition of liquidated damages and/or termination of rate contract for default.

#### **19. TERMINATION OF CONTRACT**

The quality of services given by the bidder will be reviewed every 3 months and if the services are not found satisfactory, the bank reserves the right to terminate the contract by giving 30 days notice to the bidder. The decision of the bank regarding quality of services shall be final and binding on the bidder.

#### **20. Integrity Pact :**

The successful bidder should under take the Integrity Pact as per the proforma provided by the bank to the successful bidder as per CVC guidelines.

Date: \_\_\_\_\_  
Place: \_\_\_\_\_

Signature of Authorized  
Signatory  
Name of Signatory:  
Designation:  
Seal of Company

## ANNEXURE -II

### Response of Eligibility Criteria:

S.No.	Eligibility Criteria	Yes/No	Details of Documents Submitted
1.	The bidder company should be registered in INDIA as per the companies act or have its registered office within the jurisdiction of INDIA.		
2.	The bidder's Support centre should be located at Mumbai. In case bidder is not having support centre at Mumbai, bidder should give undertaking to open the support centre in Mumbai within 1 month of award of tender.		
3.	The bidder should be engaged in providing/implementing such software solution in India for last 3 years.		
4.	The turnover of bidder / parent company of the bidder or bidding company for the last three financial years must be not less than <u>Rs.15 Crore</u> during each year. Audited Financial Statements of last 3 years should be submitted in this regard.		
5.	The bidder should have shown positive net worth as per last audited balance sheet.		
6.	All the mandatory fields in the functional requirements as per annexure- VIII should have been implemented and live in <u>atleast two Scheduled Bank</u> .		
7.	The bidder should not be involved in any litigation which threatens solvency of company and undertaking in this regard is to be submitted by bidder.		

8.	The solution provider company should be CMMI (Capability Maturity Model Integration) level 3 complied. In case the solution provider company is not CMMI 3 compliant then the solution to be provided should be accompanied by a certificate from the CMMI level 5 company confirming after evaluation/audit that the solution provided is in conformity with CMMI 3 standards.		
9.	Bidder should be the owner of the software solution offered or should have exclusive right of use/deploy the software in India.		
10.	The bidder has IP (Intellectual property) rights for the products offered to Punjab National Bank and an undertaking to this effect to be given.		
11.	<u>The solution provider should also comply with the Information Security standards as per ISO 27000 series as applicable for the implementation.</u>		

Date: \_\_\_\_\_

Place: \_\_\_\_\_

Signature of Authorized  
Signatory  
Name of Signatory:  
Designation:  
Seal of Company

## ANNEXURE III

### PART - I: Bidder Information

Please provide following information about the Company (Attach separate sheet if required): -

S. No.	Information	Particulars / Response		
1.	Company Name			
2.	Date of Incorporation			
3.	Name and Address of authorized person/Company Secretary (Please enclose the copy of company resolution)			
4.	Contact Person(s) Phone Fax E-mail Website			
5.	Provide the range of services /options offered by you covering service description and different schemes available for: <ul style="list-style-type: none"> <li>▪ Customization</li> <li>▪ Implementation Support</li> <li>▪ Warranty</li> <li>▪ Post-implementation</li> <li>▪ Ongoing Support for: - <ul style="list-style-type: none"> <li>○ ATS</li> <li>○ Helpdesk</li> <li>○ Training</li> <li>○ Documentation</li> <li>○ Others (specify)</li> </ul> </li> </ul>	Yes / No / Comments (if option is 'No')		
6.	Any pending or past litigation (within three years)? If yes please give details  Also mention the details of claims and complaints received in the last three years (About the Company / Software that are sold / licensed by the company).	Yes/No/Comments (if option is 'Yes')		
7.	Please mention turnover for last three financial years and include the copies of Balance Sheet in support of it.	Year	Turnover Rs.(in Cr)	Profit/Loss Rs.(in lacs)
		2011-12		
		2012-13		
		2013-14		

8.	Whether the company has CMMI III/ V Certification and is valid. Please mention the validity period	
9.	Whether the company has put in place ICMM practices for software	
10.	Please inform the standards that are compliant by the company (COBIT, BS, ISO etc)	

Date: \_\_\_\_\_

Place: \_\_\_\_\_

Signature of Authorized  
Signatory

Name of Signatory:

Designation:

Seal of Company

## **ANNEXURE IV**

### **PART – II: Product Information**

The following information should be provided.

S. No.	Information Required	Particulars/ Response
1.	Software Information <ul style="list-style-type: none"><li>Name of the Software Product /Solution</li><li>Version of the proposed software</li><li>Annual sales of the product during the last three years (number of installations)</li><li>Annual installations (live) in the last three years similar to the module/version proposed.</li><li>Year and place of the first live installation similar to the module/version set proposed.</li><li>Number of versions released till date since the last three years.<ul style="list-style-type: none"><li>Release month/year of last version</li><li>Release month/year of the proposed version</li></ul></li></ul>	
2.	Hardware Platforms supported. Provide details as per Annexure-XI.	
3.	Operating systems for the proposed version of the solution component. Provide specific information for each solution component.	
4.	Language and development environment in which the proposed version is coded.	
5.	Data base supported.	
6.	System Module components – Specifically indicate modules / components and their dependencies (whether the modules /components can be implemented independent of other modules/ components) and level of integration for each proposed module /component.	
7. a)	Description of the solution development environment and application tools used. Also furnish whether Third Party Tools or Tools available with the System Software/RDBMS that are used in designing the solution	
7. b)	Is any third party product included in the solution? Whether the company has full control over the source code of such bundled third party software	
8.	What is the purchasing /licensing policy for the solution?	
9.	Broad solution enhancement /integration strategy for the next 3-5 years	
10.	Whether the solution offered is single product and	

	all the modules are integrated through a menu.		
11.	Whether the solution is web enabled with security features and different User level access controls.		
12.	Indicate the minimum hardware configuration and bandwidth requirement for the solution.		
13.	Inform the standards that are compliant by the product / Solution (Product, Process and Information Security)		
14.	Bidder shall provide references of similar projects successfully completed with various Scheduled Bank organizations in the following format:	Yes/No	Details of Documents Submitted
	• Name of the project		
	• Name of organization		
	• Location		
	• No. of users		
	• Entities involved		
	• Scope of the project		
	• Exact role of the Bidder		
	• Present Status of the project		

Date: \_\_\_\_\_

Place: \_\_\_\_\_

Signature of Authorized  
Signatory

Name of Signatory:

Designation:

Seal of Company



## **ANNEXURE V**

### **PART - III. Technical Feature and Technology Architecture**

#### **TECHNICAL REQUIREMENTS**

The bidder should mention remarks/ response under 'Response/ Remarks of Bidder'.

The proposed system should have the following technology features:

WEB BASED APPLICATION FOR FOREX OPERATIONS SOLUTION FOR PUNJAB NATIONAL BANK		
S. No.	Requirement	Response/ Remarks of Bidder
I.	System Design Philosophy/ Concepts/ Architecture:	
1.	Ability to segregate the data logically by functional group, department or business unit?	
2.	Suitable for functional groups to easily tailor the product to suit their needs?	
3.	What is your general integration strategy with third party packages and customer proprietary products?	
4.	The proposed system should provide for integration tools for both synchronous and asynchronous integration?	
5.	The proposed system should have been built on Pure Internet Architecture technology. Describe in detail the architecture of the system.	
6.	The proposed application should support Unicode and support multiple languages using once instance of the package database?	
7.	Support open standards for integration like web services, XML etc.?	
8.	Is there any use of any proprietary software for design, customization, deployment etc? Please specify the detail.	
9.	Does the application provide uniform single run-time architecture? OR are there multiple run-time architecture? Please specify all of them	

<b>II.</b>	PC Client – User Interface	
1.	Fat or Thin Client? Describe software setup	
2.	Detail the approximate time required to install a client PC	
3.	If web-based client, is there any software on the client required?	
4.	Is the entire application on a web client with no client software on the PC? If partial, specify what percentage of the functionality is supported on the web client architecture?	
5.	What web servers are supported? Do we have to buy the web server software separately or does the bidder provide it?	
6.	The proposed architecture should support web browsers like Internet Explorer, Netscape Navigator etc. What web browsers are supported? Please also indicate the versions best suited for the proposed architecture?	
7.	What programming languages are used (i.e. HTML, Java script, XML etc.)	
8.	Are Active X Controls or Java applets used?	
9.	Provide screen shots of 2 of your busiest screens?	
<b>III.</b>	Customizing	
1.	The application functionality should be flexible and user friendly with capability to be customized by functional group, department or Business Unit?	
2.	Can we write our own add-on modules with your system?	
3.	How do customizations to your out-of-the-box application affect implementation of upgrades of your product?	
4.	Describe the process for modifying data dictionaries. Discuss any restrictions to this process. For	

	example, are there any specific data elements that cannot be modified by the user or are required?	
5.	Can the system allow different fields to be required and/or displayed based on an individual user profile, group or security class?	
6.	Does your product utilize a Graphical User Interface (GUI) tool for user to customize screens?	
7.	Describe the process for the customer to create a new screen	
8.	Are there any restrictions to this process (for example: formatting standards that must be adhered to)?	
9.	How do additions and modifications of screens affect the upgrade process and will these be preserved?	
10.	What is your general integration strategy with third party packages and customer proprietary products?	
11.	Can all customization be carried out using one tool set? Describe the toolset. If no, how many tools does the developer need to know? Provide details of each tool	
<b>IV.</b>	<b>Report Generation/ Design</b>	
1.	What native report-writing or inquiry tools are included with your product?	
2.	What third party report writing tools do you support (i.e. Crystal, Brio etc.)? Does the customer have to pay extra licensing fee for this?	
3.	Capability to configure sending the printing outputs fax, Screen, File, e-mail message, Excel etc. If any other report formats are supported, describe other report formats	
4.	Every data element in the system able to be reported, sorted and queried on, including those added by the customer?	
5.	Capability to format reports as Word, Excel, HTML or Acrobat Files?	
6.	Describe the process for a user to create a new report. Are "wizards" available to guide the process?	
7.	Capability to process multiple reports	

	concurrently?	
<b>V.</b>	Search Capability	
1.	Describe your search capabilities	
2.	On what technology is the search engine built? Does a third party develop it? If so, does the customer have to pay additional license fee for the same?	
3.	Capability to support various searching options viz. Full-text, keyword, wildcard, user defined ranges, query by SQL operators (=, <, >, null, not null etc), multiple conditional queries etc.	
<b>VI.</b>	System Security	
1.	Ability to configure different users (employees, trainers, managers) at different levels of security based upon their job role?	
2.	Describe your security framework. How do you structure your security roles?	
3.	The proposed system should support database level security and/or Application– Role Based Authorization (RBA)	
4.	Supports field level security?	
5.	Supports user level security?	
6.	Supports module level security?	
7.	Describe the level of access we can assign to users? The system should have the ability to customize the roles to any degree we desire? (For example: modify, Insert/ Update/ Read-Only access to certain system “resources”).	
8.	Capability to define any number of roles and flexibility to modify these roles?	
9.	Ability to define security customer’s system administrators? Can security be delegated to certain end-user groups?	
10.	Describe how the passwords and security codes are maintained on the system	
11.	Capability to allow users to change	

	their own passwords to the application?	
12.	The proposed application should provide complete logging and audit trails of activities performed by users?	
13.	Standard security features like Password Management, User Management, Access control, Encryption of data, Time out and Audit Trails etc. should be supported in the Software. OWASP guidelines should be complied.	
<b>VII.</b>	Hardware and Software Platforms	
1.	Is there any software that the bidder/OEM provide at no extra cost to the bank?	
<b>VIII.</b>	Database Platforms	
1.	Does the application support multiple RDBMS? Specify all supported RDBMS. The application should be platform (OS/ DB/ Application server) independent.	
<b>IX.</b>	Maintenance	
1.	Describe the maintenance process of the application after deployment? Provide details on the skills, number of resources required and the effort requisite to maintain the application suite. Please include database administration and system administration efforts.	
<b>X.</b>	Deployment	
1.	Describe the deployment process?	
2.	What additional hardware and software is required to deploy the applications on a WAN and for remote users without access to our network?	
3.	Describe the deployment process when application is upgraded	
<b>XI.</b>	Networking Protocol	

1.	Solution should support/work in TCP/IP	
<b>XII.</b>	Others	
1.	What is the deployment strategy recommend by the bidder?	
2.	Capability to run the reports on the browser?	
3.	Can the common web server deployed for other applications integrate with this application?	
4.	What is the authentication mechanism used by the application?	
5.	Ability to integration with Windows Active directory for authentication purposes?	
6.	The security features of the proposed application should be "encryption aware"?	
7.	The security features of the proposed application should "SSL aware"?	
8.	Provide broad hardware sizing guideline for the different tiers in the architecture?	
9.	How does the exchange of packets happen between the different tiers of the application architecture? Is it through clear text or is it encrypted.	

We confirm that, all the details mentioned above are true and correct and if the Bank observes any misrepresentation of facts on any matter at any stage of evaluation, the Bank has the right to reject the proposal and disqualify us from the process.

We hereby acknowledge and unconditionally accept that the Bank can at its absolute discretion apply whatever criteria it deems appropriate, not just limiting to those criteria set out in the RFP document, in short listing of bidders for providing software solution.

We also acknowledge the information that this bid is valid for a period of one year, for the short-listing purpose, from the date of expiry of the last date for submission of bid.

Date: \_\_\_\_\_

Place: \_\_\_\_\_

Signature of Authorized  
Signatory  
Name of Signatory:  
Designation:  
Seal of Company

**ANNEXURE-VI**

The Chief General Manager  
IT Procurement Department  
Information Technology Division  
Punjab National Bank  
Head Office, 5 Sansad Marg  
New Delhi – 110 001

Sir

**Reg: Our bid for supply and implementation of Web Based Application for Forex Operations Solution for Punjab National Bank.**

We submit our Bid Document herewith.

If our Bid for the above job is accepted, we undertake to enter into and execute at our cost, when called upon by the Bank to do so, a contract in the prescribed form. Unless and until a formal contract is prepared and executed, this bid together with your written acceptance thereof shall constitute a binding contract between us.

We understand that if our Bid is accepted, we are to be jointly and severally responsible for the due performance of the contract.

We understand that the Bank is not bound to accept the lowest or any bid received by the Bank, and the Bank may reject all or any bid; and it may accept or entrust the entire work to one bidder or divide the work to more than one bidder without assigning any reason or giving any explanation whatsoever.

We understand that the names of short listed bidders after the completion of first stage (Technical Bid) and the name of the successful bidder to whom the contract is finally awarded after the completion of the second stage (Commercial Bid), shall be communicated to the bidders either over phone/e-mail/letter/notice board.

Dated at \_\_\_\_\_ day of \_\_\_\_\_ 2015.

Yours faithfully,

For \_\_\_\_\_

Signature \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

(Authorised Signatory)

**COMPLIANCE STATEMENT**

**DECLARATION**

(Please note that Bank will not evaluate any deviation mentioned elsewhere in the bid except as mentioned hereunder)

**Terms and Conditions**

We hereby undertake and agree to abide by all the terms and conditions stipulated by the Bank in this RFP including all addendum, corrigendum etc. (Any deviation may result in disqualification of bids).

**Technical Specification**

We certify that the systems/services offered by us for tender confirms to the specifications stipulated by you with the following deviations

List of deviations

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_
- 5) \_\_\_\_\_

(If left blank it will be construed that there is no deviation from the specifications given in the Tender document)

Date: \_\_\_\_\_

Place: \_\_\_\_\_

Signature of Authorized  
Signatory  
Name of Signatory:  
Designation:  
Seal of Company



**FUNCTIONAL REQUIREMENTS.**

The bidder should mention in the column under 'Bidder's Response' whether modules for all the required features/ specifications as mentioned above are:

**S: Standard feature**

**C: Customizable, free of cost, in the current version itself, before acceptance of the Software by the Bank**

70% of all the fields and subfields present here as under should be present in the initial (Vanilla) product and other 30% fields and subfields may be customized.

Bidder has to provide all the fields in the final solution. Bidder has to provide timeline to complete all the fields marked as C by them and should not exceed 2 months.

**DETAILED FUNCTIONAL AND TECHNICAL REQUIREMENTS**

All the requirements are mandatory. Bidder shall indicate in column 3 the availability of each requirement as a standard product (S) or customization (C). The customization should be completed before the completion of pilot run at no extra cost to the Bank.

Marks will be awarded as 'Maximum Marks' for 'Standard Product Feature' and 50% of the Maximum Marks' will be awarded for Customization

**GENERAL REQUIREMENTS**

Sr. No.	Business Process	Max. Marks	S/C	Comments
1	GENERAL POINTS	14		
1.1	Multi-currency system: The system should have the ability to process, track and account for the necessary range of traded and non-traded currencies which includes INR, ACU, AED, AUD, CAD, CHF, EUR, GBP, JPY, HKD, SEK, SGD, USD, DKK, NOK, SAR, MYR, etc. The system should also be able to process, track and account for other currencies as and when they get added. It should be able to process transactions pertaining to any two of the above currencies in any order for e.g. USD/JPY & JPY/USD	2		
1.2	Reference Data: The system should be able to capture and utilize static data associated with counter parties & their ratings, scrip, products, accounts and categories like industries wise code etc.	2		
1.3	Multiple levels: The system should be able to provide full support for multiple	2		

	organizational levels and relationships. The hierarchies supported by the system should include branches, subsidiaries, agents and within each hierarchy the system should also support multiple access levels for different dealers, back office, mid office, other departments and different levels of management.			
1.4	System should support 24/7 trading and multi-EOD, Continuous processing, "Follow the sun" closings. It should be Global Deployment across different Entities, Time Zones, Financial Products and Roles. Continuous work of Front-Office and Processing independent from official P&L closing.	4		
1.5	<p>Schemes &amp; Products: The proposed solution should support setting up of different schemes and products within the same scheme, having functional features including but not limited to the following:</p> <ul style="list-style-type: none"> <li>a. Forex Products: Spot, FX Swap, Forward, NDF, Split Value, Par Forward, Funding Swap, Vanilla and exotic options, Currency Futures</li> <li>b. Bonds of USA</li> <li>c. Derivative Products: <ul style="list-style-type: none"> <li>Swaps Options</li> <li>Macroeconomic derivatives: Mainly inflation bonds, swaps and option.</li> </ul> </li> <li>d. Commodities (including Gold, Silver loans &amp; gold / silver import on consignment basis etc.)</li> <li>e. Credit: CDS, credit options, baskets etc., CDOs CLN</li> </ul>	4		
2	EDIT CHECK	4		
2.1	The system should be able to reject entries that cause edit errors.	2		
2.2	The system should have the ability to over-ride edited errors.	2		
3	DATE PROCESSING	20		
3.1	Day Count basis: The system should be able to handle all types of day count basis including 30/360, Actual/360, Actual/365, Actual/Actual, Actual/365 (Fixed).	2		
3.2	Business Day Convention: The system should be able to support International	2		

	Swaps and Derivatives Association (ISDA)-defined business day conventions such as following FBD, MFBD, PBD and MPBD for Derivatives.			
3.3	HOLIDAY CALENDARS	16		
3.3.1	The system should allow calendar schedules to be set by users and through manual updates.	2		
3.3.2	The system should allow holiday tables for entities, countries and interest rate benchmarks	2		
3.3.3	The system should allow users to input calendar schedules at least 10 years forward	2		
3.3.4	The system should be able to edit and override global calendar and holiday tables	2		
3.3.5	The system should be able to move value dates based on holidays declared at the last moment.	2		
3.3.6	The system should have the flexibility to define settlement instructions based on emergency holidays from next day.	2		
3.3.7	The system should be able to model cash flows and interest accruals based on holiday calendar and standard day roll conventions for all treasury products	2		
3.3.8	The system should have the flexibility of entry /modifications / amendments / cancellations / authorizations at any user defined levels. Such parameters changes should be defined by the system administrator, only.	2		
4	USER INTERFACE	6		
4.1	The system should be able to provide a consistent and user friendly Graphical User interface, short-cuts, smart tags and other productivity features	2		
4.2	The system should be able to provide a consistent and user friendly Graphical User interface, short-cuts, smart tags and other productivity features	2		
4.3	The system should be able to provide online and offline context sensitive help	2		
5	CURRENCY TRANSLATION	4		
5.1	The system should be able to convert between currencies without manually	2		

	converting to the home currency as an interim step in the process			
5.2	The system should be able to define home currency and wash currency	2		
6	PRODUCT SET-UP	4		
6.1	The system should allow for the creation of products and sub products	2		
6.2	The system should allow for creation of product codes	2		
7	PRODUCT STRUCTURING – FUND BASED PRODUCTS	10		
7.1	Set-up of transaction types and associated codes which will be allowed	2		
7.2	Set-up of processing rules for each transaction type like accounting for Accrued Interest, type of transactions allowed	2		
7.3	Band set-up (minimum and maximum days) on terms and conditions within which the user must operate	2		
7.4	Rules for workflow	2		
7.5	Rules for accounting based on transaction type	2		
8	TRANSACTION TAGGING and REPORTING	4		
8.1	All transactions should be tagged by product and transaction codes	2		
8.2	Reporting should be facilitated on transactions on products on the minimum parameters like Products, Transactions and Status in the workflow process	2		
9	PROFITABILITY REPORTING	6		
9.1	The system should allow for profitability reporting by product as specified in respective chapters	2		
9.2	Products should support multi-currency features proposed in the GL	2		
9.3	All incomes & expenses should by default be system calculated, and the system should not complete the transaction unless any modifications to the default values are duly authorized.	2		
10	BOOKS OF ACCOUNTS	6		
10.1	The system should have the ability to maintain separate books of accounts	2		
10.2	The system should have the ability to define any currency as the base currency	2		

	and prepare books of accounts in the base currency as well			
10.3	The system should have the ability to maintain books of accounts in both home currency and foreign currency	2		
11	ACCOUNTING STANDARD	10		
11.1	The system should support AS-11 accounting standards for Forex transactions and should be capable of migrating to IFRS as defined by RBI or other future requirements	4		
11.2	The system should be parametric for enabling AS-11 accounting standard at individual product level.	2		
11.3	It should be possible to use either FEDAI Rate or Market Rate for AS-11 enabled transactions	2		
11.4	The system should be parametric for enabling IAS39 accounting standard for Hedge accounting	2		
12	CLEARING AGENCY	4		
12.1	The system should support settlement of Interbank Forex deals through CCIL	2		
12.2	The system should support settlement of Interbank Forex deals through CLS	2		
13	REPORTING PLATFORM	4		
13.1	Rupee Derivatives reporting on CCIL	2		
13.2	OTC transactions through CCIL as per the new directives of CCIL / RBI	2		
14	Reporting platform for overseas branches should be as per the local regulations of respective country.	10		
15	ACCESSIBILITY, AVAILABILITY & TOOLS			
15.1.1	The system should allow for transaction entry, viewing of positions and MIS reports	2		
15.1.2	Ability to process and report on data in an online, real time mode	2		
15.2	Maintenance of trade history	4		
15.2.1	Ability to maintain online history of trade information for all trades	2		
15.2.2	All trades migrated from legacy systems to the new one should also be maintained	2		
15.3	Multi-entity processing	10		
15.3.1	The system should be able to handle multiple entities that Includes global, domestic, international branches, subsidiaries etc.	4		

15.3.2	The system should be able to create physical segregation of data by entities	2		
15.3.3	The system should be able to consolidate data on the basis of Entity reports and combination of one or more entities	4		
15.4	Interfacing and deal processing	28		
	The system should be able to interface with other solutions for receiving inputs and sending outputs, automatically without any manual intervention, depending on case to case, such as automated information pricing feeds including, but not limited to:			
15.4.1	Cogencis / Reuters Rates & Deal Pickup & Bloomberg for Forex deals	2		
15.4.2	CCIL's FX-Clear, FX-Swap, FX-ALL, Citi-Fx, Barx, Autobahn, JP Morgan, IBS & D2, 360T, ICAP- EBS,RMDS, RTNS, RTFX, & any other	2		
15.4.3	SWIFT	2		
15.4.4	FIMMDA for valuation (as per the latest guidelines sector wise)	2		
15.4.5	Market Risk management (SAS) system.	2		
15.4.6	NSE / MCX / BSE Futures trading & risk management platform separately for Proprietary and Client RETAD for Merchant Transactions for Export, Import, Inward remittances, EEFC, PCFC,FDBD transactions and MF contracts from Branches	2		
15.4.7	Any other exchange platform	2		
15.4.8	The system should support seamless transfer of data from Front Office to Back Office	2		
15.4.9	Seamless Integration with Core Banking Solution (Finacle) for accounting both way transactions to support merchant client business. The entries at treasury should be automatically posted once completed in CBS Finacle.	6		
15.4.10	After authorisation of IMT,OMT and other merchant deals at back office, the system should be integrated with CBS-Finacle so that the intersol accounts of the respective branches gets the credit / debit	4		
15.4.11	Settlement messages should be encrypted before interface with other	2		

	networks			
15.5	SWIFT as an interface with the Integrated Treasury Management System Should support the following :	14		
15.5.1	The system should have complete interface with SWIFT for sending payment instructions, receiving confirmation so as to avoid risks of manual errors & omissions	4		
15.5.2	System should automatically generate SWIFT confirmation slips & confirmation letter. System should also be able to handle automatically MODIFICATION / AMENDEMENT / CANCELLATION of SWIFT messages	2		
15.5.3	System should support of inward SWIFT confirmation messages for FOREX, money market, derivatives deals.	2		
15.5.4	It should facilitate Message traffic flow with financial information both inward as well as outward	2		
15.5.5	Automatic Reconciliation/matching of MT300, MT 320, MT 640, MT 650, MT600, MT940/MT950 etc.	4		
15.6	The system should be able to facilitate straight through processing by automatically forwarding transactions through the transaction chain from front office to middle and back office and to CBS and vice versa	6		
15.6.1	All internal processes from initiation through execution, confirmation, settlement and final document preparation should be streamlined	2		
15.6.2	The system should be able to generate accounting entries directly for the settled deals	2		
15.6.3	The system should be able to facilitate straight through processing of SWIFT messages and generate accounting entries	2		
15.7	View from the system	10		
15.7.1	The system should allow for viewing of all data from the system which includes: Trade details, Static data (masters), Mark to market values, Accounting Entries etc.	4		
15.7.2	Current market information - Currency	2		

	Rates			
15.7.3	Historical market information - Currency Rates	2		
15.7.4	Audit trails (Fx, MM, System, Derivative etc.)	2		
16	NOSTRO RECONCILIATION: The system should be able to reconcile treasury transactions with electronically / manual uploaded/swift uploading / manually entered received bank statements on a daily basis. Currency wise/ age wise / Branch wise outstanding entries. Reversal of Reconciliation.	58		
16.1	The system should be able to capture all the entries in Nostro statement /data transmitted by SWIFT. (Interface with inward SWIFT messages such as MT 940/950	2		
16.2	Provision to provide unique continuous number for each entry available in MT 940/950	2		
16.3	The system to generate currency wise, nostro-wise mirror statements with all details including FC, INR amount on daily basis. Closing balance also should be made available.	2		
16.4	Auto reconciliation of the Inter Bank deals with the Nostro statements(additional use of swift deal confirmations received may be taken into account). Provision to view; modify selected matched items by users.	2		
16.5	The system should be able to auto match one to many transactions and many to one transaction.	2		
16.6	List of un-reconciled merchant entries should be generated branch wise and nostro wise and a follow up Letter to be printed out for mailing to Branches	2		
16.7	The system should auto generate SWIFT query messages to the respective Nostro's for un-reconciled entries.	2		
16.8	In case of EEFC/FCNR entries system should be capable of handling auto reconciliation.	2		
16.9	Rules Creation for manual reconciliation/forced matching	2		
16.10	The system should give details of the entries reconciled/un-reconciled. It should provide the following details:	2		
16.10.1	Value date	2		



16.10.2	Transaction amount in foreign currency	2		
16.10.3	Remaining amount of foreign currency	2		
16.10.4	Branch reference	2		
16.10.5	Agent reference	2		
16.10.6	Branch details(Branch Number, Branch Name)	2		
16.10.7	In case of reconciled entry, by whom it was reconciled	2		
16.10.8	field 86 of the swift message	2		
16.11	Absorption of small outstanding into P&L by user input and relevant report should be generated.	2		
16.12	Weekly outstanding list to be generated for follow-up and for Submission to Higher Authorities.	2		
16.13	Provision to view nostro records by various parameters like date, value date, name, nostro bank, amount, reference no etc. Also it should allow wild card search.	2		
16.14	Provision for generation of balancing report for currency and Nostro containing outstanding debits/credits from mirror and nostro records at periodic intervals.	2		
16.15	Exception report should be available for unidentified and outstanding debit entries in nostro and mirror at user defined interval.	2		
16.16	The system should automatically pop up if there is difference after Capture in the the credit and Debit balances of any Nostro accounts	2		
16.17	The system should generate a report of all the Nostro Balances after Capture of MT 940/MT950 in to the system,	2		
16.18	The system should automatically match/reconcile entries in CCIL and CLS accounts	2		
16.19	Reconciliation statement – current date or as on of any back date	2		
17	INTEGRATION	8		
17.1	Integration with other systems should be facilitated by the following modes:			
17.2	Batch processing for accounting.	4		
17.3	Online processing for capturing currency rates and trades from Reuter's Dealing 3000.	4		
18	Market Data	10		
18.1	System should support real time market data feed from feed providers (Reuters, Bloomberg, Cogencis), any other provider	4		
18.2	System should support sanity checks for	2		

	market data and failover capabilities			
	System should support upload of market data from external sources e.g. Excel files.	2		
	System should support error handling and notifications for market data errors	2		
	<b>Total Marks</b>	<b>272</b>		

### Functional Requirements

Sr. No.	Business Process	Max. Marks	S/C	Comments
1	Deal Capture and Execution	18		
1.1	Deals capture facility including amendment and reversal	2		
1.2	Ability to download/upload deal transaction from external files and interface with dealing platforms available to various desks.	2		
1.3	Ability to offer quick entry of trades, capturing customer spreads and back-to-back cover with interbank desks	2		
1.4	Ability to automate blotter functionality	2		
1.5	Ability to facilitate internal deals and inter-desk	2		
1.6	Pre-deal limit check and limit reservation facility	2		
1.7	Handling of scheduled and unscheduled holidays across different countries, different centres and different product classes	2		
1.8	Ability to amend or cancel a deal (e.g., incomplete deals) at deal verification stage, by authorized personnel along with maintaining of relevant audit trail	2		
1.9	Ability to Support Algorithmic Trading	2		
2	Deal Analysis	16		
2.1	Ability to offer multiple scenarios for analysis across different books	2		
2.2	Calculation of cost of carry and cost to close	2		
2.3	Real time view of economic P&L	2		
2.4	Port-folio level/desk level/ dealer level P&L analytics with drill down functionality	2		
2.5	View volatility for all products containing optionality	2		

2.6	Real time view of PV01 and Greeks	2		
2.7	Ability to access, receive and utilize real time data feeds from all external information sources (e.g. Bloomberg, Reuters, Cogencis etc.)	2		
2.8	Ability to offer online statistics and graphics for all instruments including rates, availability and historical prices and volume	2		
3	Position Management	14		
3.1	Provide real time view of positions by client, client segment, product type, currency and entity.	2		
3.2	Provide real time view of risk positions by product, trader, desk and also consolidated global risk position	2		
3.3	Ability to view positions on an individual book as well as consolidated portfolio basis	2		
3.4	Ability to provide position calculations for a period of one day and other defined periodicities	2		
3.5	Ability to view all positions on a real time basis including P&L, duration and future equivalent on a conversion factor and modified duration basis	2		
3.6	Ability to display and modify the screen set up by individual user to view positions in different perspectives	2		
3.7	Ability to view risk and positions across the portfolio by maturity, product and/or movements in underlying assets	2		
4	Cash Flow and Fund Management	6		
4.1	Ability to setup dynamic cash flow positions and its management	2		
4.2	Ability to provide cash flow projections (i.e. history, current balance and future projection) of Nostro / bank balances on a real-time basis, reflecting recent trades, cancellations, and amendments for products including All Forex/Money Market payments/ receipts Bond coupons and maturities Other instrument coupons and maturities Forward value Bank/Nostro account transfers Ability to display cash flows at any portfolio level	4		
5	Pricing	16		

5.1	Ability to offer global pricing & pricing tool functionality	2		
5.2	Ability to offer predefined templates to facilitate pricing for primary and secondary traded products	2		
5.3	Ability to provide pricing functions and utilities integrated into the system to calculate instrument prices, Greeks, and position equivalents for reports	2		
5.4	Ability to price options via pricing calculators on individual workstations	2		
5.5	Ability to offer curve-based pricing capabilities	2		
5.6	Ability to offer price and yield simulations functionality	2		
5.7	Ability to value positions through multiple methods: nominal, maturity and market evaluation methods	2		
5.8	Ability to provide different methods of calculation for pricing function	2		
6	Portfolio and Internal Performance Management	10		
6.1	Ability to provide profit and loss computing functionality and drill down functionality over any portfolio by transaction, by currency, for realized/unrealized, using funding cost and allocated cost	2		
6.2	Ability to support mark-to-market/ NPV calculations	2		
6.3	Ability to support accrual calculations	2		
6.4	Ability to enable profit & loss by choice of currency	2		
6.5	Ability to allow configuration of profit and business center hierarchies	2		
7	Ability to configure the following parameters for a portfolio: Currency, Reference currency, Security and user profile, Display layout, Portfolio levels of detail etc	2		
8	Derivatives	50		
8.1	Trade capture from NSE/MCX	2		
8.2	Monthly Provision should be calculated and posted and reversed automatically.	2		
8.3	Daily bench mark rate updating.	2		
8.4	Upload of exchange file and MTM	2		

	process and posting.			
8.5	Generation of margin files to be uploaded in exchanges.	2		
8.6	Generation of M-duration report (Origin)	2		
8.7	Friday MTM calculation.	2		
8.8	Calculation of capital charge.	2		
8.9	Mail to client on daily basis MTM, Contract Note, Quarterly Statement, Position Statement.	2		
8.10	All reports to be generated in all types of reporting format.	2		
8.11	Alerts of reporting of required reports as per the frequency.	2		
8.12	Margin alerts.	2		
8.13	Counter party limit updating.	2		
8.14	Collateral limit updating.	2		
8.15	Deal confirmation.	2		
8.16	Reporting of MTM to client and branch on different intervals through Emails.	2		
8.17	Calculation of current exposure, potential future exposure, total exposure, etc all on specified dates and as per maturity bucket.	2		
8.18	Generation of backdated PVO1 report.	2		
8.19	Calculation of VAR (value at risk).	2		
8.20	Updating of compliance officer particulars.	2		
8.21	Real time settlement.	2		
8.22	Calculation of Turnover fees transaction charges for various exchange.	2		
8.23	Calculation of stamp duty of exchange transactions.	2		
8.24	Generation of reports as per filter.	2		
8.25	Exchange turnover contra entries to be posted automatically.	2		
9	MASTER (ONE-TIME) DATA CAPTURE	4		
9.1	Counter parties: The system should be able to capture the following details e.g. Name, Credit Rating, Address & phone no., Status – Active/ Inactive, Limits Settlement instructions for Forex and derivatives transactions, Foreign Currency Bank accounts, PAN, SWIFT Code , RTGS – IFSC, CCIL / CLS Code etc.	2		
9.2	Brokers: The system should facilitates capturing the list of notified/ approved brokers and should capture the following	2		

	details for each broker e.g. Name, Address, Products handled by broker, Limits, Brokerage rate, Settlement instructions, PAN & Service tax no., Telephone number, Fax, e-mail ID, Complete Bank account detail with IFSC code, DP ID, DP Name, Client ID, Client Margin (slab wise & currency wise)			
10	DEAL CAPTURING	14		
10.1	The system should have the ability to allow capture and display of the following inputs: Trade date, Value date, Time of trade, System generated deal number, Deal originating entity and desk, Dealer, Transaction type, Traded price & Currency, Exchange rate, Reporting value in foreign currency, Reporting value in INR, Interest rate, Interest frequency, Interest type (fixed/ floating) for MM transactions, Name of counter party, Name of broker, Principal amount, Staggered Redemption on principal amount etc. System should be able to handle cash flows with different interest payment & principal redemptions dates, Interest amount, Total consideration, Mode of delivery, Brokerage amount etc. System should alert dealer where tolerance limits are breached	2		
10.2	The system should be able to alert the dealer in cases where dealer limits are being exceeded at the time of deal entry	2		
10.3	The system should permit entry of remarks in free text fields	2		
10.4	The system should be able to restrict the user from inputting past trade dated entries for investments	2		
10.5	The system should be able to provide an audit trail for all transactions entered from trade date onwards & for exceptions	2		
10.6	The system should be able to accommodate the entry of forward value date transactions	2		
10.7	Deal numbering : The unique trade identification number should be printed in	2		

	the deal slip along with the other deal details			
11	Deal tickets	28		
11.1	Automatic generation, view, print and review of deal tickets	2		
11.2	Provide unique deal numbers for each deal ticket	2		
11.3	Generate multiple deal tickets for each transaction	2		
11.4	Print separate deal tickets for internal and external purposes	2		
11.5	Ability to route deal flow based on Deal Ids	2		
11.6	The system should preserve historical data of all deals.	2		
11.7	Generate a report of all cancelled / modified / deleted deals	2		
11.8	Provide interface with existing Dealing Systems	2		
11.9	The system should have the facility of on-line reporting of all merchant Forex transactions (position as well as resource related) from the various branches.	2		
11.10	The system should have chatting facility for quoting and confirming special rates with branches.	2		
11.11	The system should be set up at the existing „B“- Cat branches with facility to extend the same to newly designated „B“ Cat branches at future date.	2		
11.12	The dealing system should be capable of seamless integration with Treasury front office & back office systems.	2		
11.13	The system should be able to ensure that the copies deal slips generated are seamlessly sent to Back Office for authorization, Mid Office in respect of limit exceptions and further processing where ever necessary.	2		
11.14	The system should be able to isolate certain deals and not send them to the back office based on certain predefined system parameters.	2		
12	DECISION SUPPORT TOOLS	44		
12.1	Cross Currency spot & forward calculation Overnight Indexed Swaps, Interest Rate Swaps Cross Currency Swaps,	2		

	Currency Options: Black Scholes Model, Garman Kohlhagen Model, Monte Carlo Simulation Model, Binomial Tree Model, Interest Rate Caps / Floors, Black's model In the above pricing & calculation models, the system should be able to support the following interpolation techniques: Linear, Log linear, Nelson Siegel, NELSON SIEGAL SVENSSON and Cubic Splines			
12.2	The system should provide for scenario analysis of the portfolio · Multi-dimension matrices ·User-defined and flexible shift on different market data inputs and horizon date, P&L and sensitivities outputs with multiple breakdown should be available	2		
12.3	The system should be able to retrieve stored deals that are in entered state, prior to confirmation	2		
12.4	The system should be able to display to a dealer the instrument-wise authorized limits	2		
12.5	The system should be able to update cash and security positions on a real time basis	2		
12.6	The system should be able to facilitate deal simulation before commitment and provide a warning if the deal results in a limit violation	2		
12.7	The system should provide following information :			
12.7.1	Position Reports – Deal wise, Currency wise, counterparty wise	2		
12.7.2	Profitability – Dealer wise & consolidated	2		
12.7.3	Fund Flow Statements(next week, next fortnight, from-date – to-date) for :			
12.7.3.1	Forex Operation – Merchant funds flow, Interbank Fund Flow	2		
12.7.3.2	Investment Operation – Category wise & consolidated	2		
12.7.4	Identification of the instrument / amount already Hedged	2		
12.7.5	Utilization of Contracts	2		
12.7.6	Holding Rates	2		
12.7.7	System should enable calculation of	2		



	forward Rate			
12.8	The system should be able to pre-empt in case of possible violation of the following limits:			
12.8.1	Counter party limits, AGL/IGL Limits	2		
12.8.2	Counter party group credit limits	2		
	Instrument-wise limits	2		
	Broker limits	2		
	Settlement & Clearing Agent Limits	2		
12.9	The system should be able to analyze the overall portfolio, or any user-defined portfolio by changing selected parameters	2		
12.10	The system should be able to estimate projected cash flows by currency	2		
12.11	The System should be capable of real-time portfolio management:	2		
	· Flexible Risk / position / P&L viewer			
	· Real-time monitoring			
	· What-if analysis and hedging			
	· P&L Variance			
	· Extensive trade querying capability			
13	SYSTEM SUPPORT FOR FOREX TRADE :	52		
13.1	Facility of netting of inter-bank forward deals for any particular date, in order to release counter-party limits (Bilateral netting).	2		
13.2	All deals done in forex should be captured by Dealer's pad, time-wise, currency-wise and dealer-wise.	2		
13.3	Monitoring of tolerance limits while inputting the forex deals by the dealer. The system should alert the dealer in case of exceeding the limit.	2		
13.4	Facility of inputting forex deals in 4 categories- Merchant, Trade, Money Market, FCNR funding, Arbitrage and Funding , Vostro Funding etc. (all these categories can be defined as per user requirement if there is an efficient folder system structure)	2		
13.5	The facility of inter-dealer position transfer	2		
13.6	The facility of inter-bank netting of forward deals	2		

13.7	Provision of STP of deals done through Reuters,D2, D3, CCIL., IBS Net, 360T, ICAP-EBS and other inter-net based trading platforms	2		
13.8	Once the merchant deals from RET-AD and the interbank deals from the trading platforms flow to the system, the front office position pad is to be updated enabling the dealers to have dealer wise and currency wise position.	2		
13.9	Deal modification and deal deletion facility before back office authorization and the audit trail of these modifications/deletions to be recorded by the system.	2		
13.10	Report of all deals modified/deleted between any two dates.	2		
13.11	Trading Profit/Loss report dealer wise, currency wise	2		
13.12	View facility of full detail of position pad- Dealer wise currency wise total position	2		
13.13	Facility to input Reciprocal deals	2		
13.14	Report of all NOSTRO Balances at every day	2		
13.15	Input facility of fund transfer from one NOSTRO to other	2		
13.16	SWAP deals Trading <ul style="list-style-type: none"> <li>- Facility for daily MTM</li> <li>- Facility to input carry cost</li> <li>- Report of profit/loss on daily basis</li> </ul>	2		
13.17	Facility to view unauthorized deals pending for authorization	2		
13.18	Cumulative turn over report of deals	2		
13.19	Cumulative trading profit between any two dates dealer wise, currency wise	2		
13.20	At the time of input of IB/swap deals, there should be a provision to mark the deal not for revaluation (by default yes for revaluation)	2		
13.21	Generation of Gap statement (with resources/deployment in the respective bucket of maturity) – AGL & IGL	2		
13.22	Facility of getting funds flow statement for a period with each day shown separately for forex deals, depo deals, merchant purchase and merchant sale deals or any one or combination of these types of deals.	2		
13.23	Facility of inputting inter-bank USD-INR	2		

	deals as for CCIL settlement or RTGS settlement. CCIL should appear by default in all USD-INR deals.			
13.24	Facility of getting a report of net USD purchase or sale under CCIL for each value date.	2		
13.25	Dealer position pad should be updated on real time basis	2		
13.26	Import EDC gain should be captured in the system	2		
14	Facility of revaluation with the appropriate spot and forward rates, As per FEDAI and user defined inputs, the revaluation should be done as per gaps and individual deals. . It should be product specific (outright / swap / long swap / RBI deals) with flag available. The corresponding entries of profit / loss should be system generated.	6		
14.1	Further, revaluation of all FX positions on basis of FEDAI-published EOM rate. System must be capable of accepting the INR cross forward rates quoted for maturity on EOM pillar dates and bootstrap and correctly evaluate all INR and non-INR FX positions for all maturity dates and interpolation for forwards.	2		
14.2	Separate GAP /revaluation facility for FCNR-B, Nostro, EEFC/DRFC/DDA related portfolio	2		
14.3	Separate GAP /revaluation facility for individual portfolio	2		
15	SYSTEM SUPPORT FOR DERIVATIVE TRADES	72		
15.1	Structuring Tools			
15.1.1	System should provide powerful pricing and structuring tool for all asset classes:	2		
	· Payoffs across asset classes			
	· On the fly structure or predefined structure (within or across asset classes: Straddle, Strangle, Dual Currency Deposit.			
	· 2-way pricing, sales margin and mark-up			
	· Generic solving, Charts and graphs			
15.2	Generation of deal slip and confirmation letter, interest rate reset notice, payment / settlement notice,	2		

	option exercise notice, barrier trigger notice			
15.3	Deal slip should contain information of the underlying Deals	2		
15.4	A daily transaction report with filters should be generated by the system showing all purchase and sale details during a particular day. The report should be generated after all deals are entered.	2		
15.5	On a daily basis when all deals are entered for purchase and sale of securities /stocks, the portfolio should automatically get updated with appropriate holding rates in case of purchase / sale and profit figures in case of sale. Facility for short selling also to be provided	2		
15.6	The fully updated portfolio should appear at the day end once all the deal tickets are generated and authorized such that manual intervention is not required (There should be provision of manual intervention if required).	2		
15.7	Back office should directly get an updated portfolio at the end of each trading day such that no separate manual record has to be generated by the front office.	2		
15.8	On a daily basis, once the total portfolio is authorized and updated, a record of the same should be saved in the system for that particular day which may be used as a historical record for future reference. There should be provision to extract historical records into excel sheets for use by management	2		
15.9	There should be provision to find brokerage details and percentage wise distribution of business to brokers for risk management purpose.	2		
15.10	Profit and Loss Statement should be available for any specified period (daily, weekly, monthly, quarterly or any specified date range) – dealer wise, segment wise & consolidated.	2		
15.11	The system should support various bucketing conventions including end-of-months bucketing, additionally system should allow various mode of	2		

	position/risk split across bucket.			
15.12	The system must be able to support securities with a different price-yield convention in its final year without needing to create additional duplicate securities.	2		
15.13	The system must be able to support cancellation of FX forward contracts, compute the fee chargeable with margin and recover the same in INR. Additionally, the system should allow for the option to recover the fine upfront with or without discounting.	2		
15.14	The system must be able to support the early utilization including calculation of outlay of funds of FX forward contracts by clients and create the swap position automatically for cover by the interbank desk.	2		
15.15	The system should support the conversion of a spot deal to a forward deal.	2		
15.16	The system should support the identification of the trading basis of FX forward transactions and block any deals not booked with an assigned basis. Deals booked must impact the relevant allocated limits of the customers. In case of breaching past performance limit, the system should block the deal and in case of reaching 85% of limit, the dealer should be alerted.	2		
15.17	System should support securities where final capital repayment follows preceding roll convention and interest payments follows following or modified roll convention.	2		
15.18	System should support real-time or on-demand availability of various regulatory reports including FTD, NOOP, Day light, GAP, NDTL, SLR etc.	2		
15.19	System should support securities position bucketing by duration.	2		
15.20	System should support preferred margin pricing and time-to-next-coupon duration for floating securities	2		
15.21	System must support the linking	2		

	of security transactions with its hedging transactions (such as futures and IRS) and allow monitoring of the hedge effectiveness and overall risk. The linking should be flexible with deals being easy to add to and remove from the grouping and			
15.22	Hedge effectiveness testing of derivatives deals with underlying assets / liabilities.	2		
15.23	System should specifically tag underlying items with hedging instrument, to make available P/L or accrual comparison of underlying and hedging deals	2		
15.24	System must be capable of supporting the switching of reference rate (e.g. from USD LIBOR 3M to USD LIBOR 6M) in loan/deposit via a single action without needing the user to unwind and book a new deal. Such switching should not impact the past and should handle the accruals. It should also support the borrowings on Interest Resetting clause without forcing to close the deal and create a new deal.	2		
15.25	System should support draw-down and partial draw- down on loans or deposits with proper handling of the accruals with Interest Resetting clause.	2		
15.26	System should support the conversion of P&L accumulated in non-INR currency to INR and transfer the arising FX position for covering in the interbank market.	2		
15.27	System should support roll-over of positions daily and allows specification of the applicable roll-over rate.	2		
15.28	System must be capable of giving the average YTM on assets and liabilities on the banking book.	2		
15.29	System should support FX curve construction using cross-currency basis swaps and must be capable of further separating FX basis risk from pure interest rate risk for risk management.	2		
15.30	System should support booking FX swap against two different counterparts; this is in case of broker deals where different counterparts are assigned on the different	2		

	legs of the same swap.			
15.31	System should support the transfer of FX position to the MM desk for funding.	2		
15.32	System must support drill-down of position to deal level.	2		
15.33	System must support easy to use functionality to split cross positions and transfer positions between portfolios.	2		
15.34	System must have real time analytical tool which facilitate the dealer of complex position	2		
15.35	System must support pricing structure trade builder	2		
15.36	System should support different trading calendars for FOREX operations.	2		
<b>Total Marks</b>		<b>352</b>		

### Market Risk Management Requirements

Sr. No.	Business Process	Max. Marks	S/C	Comments
1	Market Risk	12		
1.1	Online Real-time monitoring of all types of deals in bank's trading book	2		
1.2	VaR Methodologies: The system should be able to generate AGL, VaR and provide risk measurements and analytical tools for different VaR Methodologies, for user defined confidence levels & holding periods	2		
1.3	The system should calculate individual transaction/deal wise, Asset Class wise, Portfolio wise VaR i.e. FX (Trading & Banking Book), MF UNITS, Interest Rate related instruments under resources with an option for scalability in regard to holding period / time horizon / VaR computation methodology under overlapping / non-overlapping basis	2		
1.4	Provision for computing specific VaR & incremental VaR	2		
1.5	Distribution of VaR across the following: <ul style="list-style-type: none"> <li>- Dealer wise VaR</li> <li>- Products wise VaR</li> <li>- Market wise VaR</li> </ul>	2		
1.6	MTM and revaluation: Both FIMMDA and FEDAI valuation	2		

	should be supported			
2	Counter Party Credit Risk	14		
2.1	Real time limits monitoring for Currency, Dealer and Counterparty based on Notional Principal, credit conversion factors	2		
2.2	Offer real time view of counterparty limits based on the current exposure method	2		
2.3	View of trading limits by product type and by trader on real time basis	2		
2.4	Real time alerts and facility to authorize limit violations	2		
2.5	Ability to scan and attach paper based notes during authorizations for future reference during audits and inspections	2		
2.6	Exception management (i.e. monitoring, flagging and reporting) for limit violation	2		
2.7	Rate scan provision	2		
3	Market Risk Limits	8		
3.1	VaR Limit	2		
3.2	Sensitivity limits	2		
3.3	Limits based on Greeks	2		
3.4	Limit exceeded report	2		
4	FX swap/SPOT & Outright valuation, MTM & realized P&L on a real time basis dealer-wise and consolidated. Breaches should generate trigger mails/sms	2		
5	Operational Risk Capital Computation using The Standardized Approach (TSA)	2		
6	The system should allow for the measurement of the Counterparty credit risks for treasury	6		
6.1	System should generate exception report for limit violations	2		
6.2	Facility to download and capture benchmarks rates.	2		
6.3	Facility to download and capture currency exchange rates.	2		
7	EXCEPTION REPORTING	10		
7.1	Intra-day exceptions to be monitored on real time basis and on-line breach alerts should be generated at Mid Office with mandatory printing of the exception report with reasons, deal particulars, time etc as & when such breaches occur	2		
7.2	End of Day Exception report should be generated mandatorily & no user should have	2		



	the power to skip the same			
7.3	The system should be able to carry out sensitivity analysis.	2		
7.4	The system should be able to support warning messages and exception reporting for credit exposure limit violations	2		
7.5	The system should be able to measure various exposure norms, monitor counterparties' credit exposure against authorized limits. The credit exposure on off-balance sheet items (Derivatives) need to be arrived based on RBI specified Current Exposure method. The system should provide necessary flexibility to adopt to the latest regulatory guidelines in this regard.	2		
8	LIMITS TO MARKET OPERATIONS	6		
8.1	The system should be able to track user-defined trading portfolio wise & dealer wise limits and provide viewing and reporting	2		
8.2	The system should be able to define and monitor limits at various levels in the hierarchy	2		
8.3	The system should be able to issue a system notification to dealers that a limit is violated	2		
9	POSITION TRACKING	16		
9.1	The system should be able to update positions on a real time basis	2		
9.2	The system should be able to view positions for user defined portfolios	2		
9.3	The system should be able to online monitor Trading Book limit, PV01 limit, NOOP Limit, VaR Issuer-wise limits, Broker-wise Turnover limits, Stop Loss limits both deal wise and on periodic basis.	2		
9.4	The system should be able to generate, view and print positions reports with fair market value provided by information feeds	2		
9.5	The system should be able to generate, view and print positions reports	2		
9.6	The system should enable querying of limits at an individual as well as aggregate level	2		
9.7	The system should be able to identify online breaching of limits on	2		

	consolidated basis and segment basis and generate exceptional report.			
9.8	Exposure monitoring branch wise	2		
10	RATE SCAN, LIMIT & EXPOSURE MONITORING	10		
10.1	The system shall allow users to customize triggers, alarms and thresholds (i.e. increase/decrease thresholds).	2		
10.2	The system shall have an automated monitoring and reporting of breach in exposure norms, limits (daylight / overnight / counterparty / IGL / AGL / pre-settlement / Settlement / Issuer / Currency / Broker / Gap / Authorization / Stop-Loss Limits etc.), duration, M-Duration, PV01 etc.	6		
10.3	The breach in exposure norms & limit as referred above must give alert messages (on-screen pop-ups) to back office, front office and generate exception report & audit trail on daily basis.	2		
11	MARKET RISK MANAGEMENT SYSTEM	20		
11.1	VaR Methodologies: The system should be able to generate the following reports and provide risk measurements and analytical tools for different VaR Methodologies, For user defined confidence levels & holding periods.	2		
11.2	Historical Simulation	2		
11.3	Variance-covariance	2		
11.4	Distribution of VaR across the following: Dealer wise VaR Products wise VaR Market wise VaR	2		
11.5	Calculation of contribution of every dealer, product and market towards the overall VaR numbers	2		
11.6	The system should be able to do rate scan of market rates on a real time basis	2		
11.7	The system should do valuation of forex portfolio on daily basis	2		
11.8	The system should provide NOOP AGL computation as per bank requirements	2		
11.9	Duration Related Measures: Report on bucket wise (as per STL) investments/assets with weighted average Duration/M duration of such	2		

	securities/assets for each buckets and consolidated portfolio as a whole			
11.10	Fx Limit (Overnight) / IGL / AGL portfolio wise: Actual utilization of various limits on a daily basis has to be captured and average utilization report on monthly/quarterly/annual basis with minimum and maximum utilization slabs.	2		
<b>TOTAL</b>		<b>106</b>		

### Back Office Requirements

Sr. No.	Business Process	Max. Marks	S/C	Comments
1	DEAL VERIFICATION	14		
1.1	Ability to provide configurable deal verification function by status & authority	2		
1.2	Ability to provide deal verification facility by exception i.e., exception rules should be configurable by Entity, Product, Counterparty, Dealer, Currency, Country, Location, Amount, Exchange Rate, Others etc	2		
1.3	Configurable Work flow engine to add or reduce multiple verification levels	2		
1.4	Ability to configure transaction data fields that can be amended during deal verification stage	2		
1.5	Ability to amend or cancel a deal (e.g., incomplete deals) at deal verification stage, by authorized personnel along with maintaining of relevant audit trail	2		
1.6	Ability to append standard settlement instructions (SSIs) to deals	2		
1.7	Ability to generate Exception Report	2		
2	DEAL CONFIRMATION	18		
2.1	Ability to generate and manage confirmations, including interfaces, for all products	2		
2.2	Ability to define the format and wordings of confirmation based on the characteristic of the product/ transaction	2		
2.3	Ability to format and maintain different formats for confirmation by: Product/ instrument, payment type, counter party and currency etc	2		
2.4	Ability to generate automatic confirmation letters for all transactions on contract date and also for NON-CCIL trades separately	2		
2.5	Ability to support automatic (through upload) sending of confirmations through structured messages by electronic media such as SWIFT (Applicable MT series), e-mails and fax	2		

2.6	Ability to auto match confirmations received from counterparties that should be automatically uploaded through the SWIFT interface	2		
2.7	Ability to generate automatic reminders for confirmations that have not been received in a pre-defined format and at pre-defined intervals	2		
2.8	Ability to suppress confirmation for deals confirmed but cancelled on the same day	2		
2.9	Ability to suppress confirmations and payments relating to internal deals	2		
3	Settlement	28		
3.1	Ability to allow the user to use default settlement instructions at the time of deal entry	2		
3.2	Ability to allow the user to input different settlement instructions, which should be authorized at an appropriate level	2		
3.3	Ability to handle settlement splitting of one deal across multiple take ups (with or without residual amount), multiple settlement accounts and settlement of any residual amount on maturity date	2		
3.4	Ability to support aggregating multiple deals into one Settlement	2		
3.5	Ability to support automatic generation of payment and receivables list for user defined maturities and contract date and for specific counterparties	2		
3.6	Ability to automatically process all the transactions, for which settlement instructions have been defined	2		
3.7	Ability to generate settlement advice for all deals Executed	2		
3.8	Ability to generate due date diary for interest & redemption with adequate filters.	2		
3.9	Ability to allow part settlement of interest Redemption	2		
3.10	Ability to allow modification of interest receivable amount on due date because many a times there is minor mismatch in actual interest received from issuer due to rounding off.	2		
3.11	Ability to settle the deals after netting the transactions, to arrive at the net position status by counter party, by products and by currency	2		
3.12	Ability to track call/ put options on securities held	2		
3.13	Ability to generate RTGS messages wherever Applicable	2		
3.14	Ability to send amended messages automatically to CCIL /CLS in case of any amendment made to the original deal.	2		
4	Matching and Transaction Reconciliation	10		

4.1	Ability to allow user definition of primary and secondary keys for matching and reconciliation	2		
4.2	Ability to auto reconcile deals with the Nostro statements	2		
4.3	Ability to support for both automatic as well as force-matching for reconciliation	2		
4.4	Ability to support manual reconciliation for unreconciled entries	2		
4.5	Ability to provide for aging of unreconciled deals	2		
5	NOSTRO Management			
5.1	Ability to support management of multiple Nostro accounts by currency	2		
5.2	Ability to transfer funds between Nostro accounts automatically by using MT 200 for settlement Settlements-Support for MT 202,210, Local RTGS	2		
5.3	Ability to set alerts by Nostro account to warn when agreed minimum balance is close to breach	2		
5.4	Ability to provide for Nostro balance projections on a real time basis that reflects the recent trades, cancellations and amendments	2		
5.5	Ability to provide predictions of expected movements in Nostro accounts	2		
5.6	Ability to calculate/monitor interest on Nostro accounts as per user defined parameters	2		
5.7	Ability to calculate interest on back valued funds in the Nostro accounts : Nostro / Mirror – Transactionsn, Nostro / Mirror view, Nostro statement entry (Modify / Splitting), Nostro Statement Entry (Manual Input), Nostro Statement clubbing.	2		
6	Transaction Management	12		
6.1	Ability to monitor and report on a product / transaction throughout its life cycle until maturity / settlement	2		
6.2	Ability to provide an audit trail on the movement for each transaction until it matures / is settled	2		
6.3	Ability to allow user to trace transactions on a post date basis, by but not limited to Product / Instrument, Dealer, Counter party, Customer, Deal Date, Maturity Date, Trade Date/ Value Date, System Reference Number/ amount etc	2		
6.4	Ability to generate statement of outstanding transactions (along with contract details) for counterparty on an ad-hoc basis	2		
6.5	Ability to compute and automatically process clearing and agency fees for a particular product	2		
6.6	Ability to specifically monitor collateral in case of collateralized security transaction	2		
7	ACCOUNTING	26		

7.1	The solution must be IFRS compliant. Thus though the actual accounting entries could be based on IAS, the software should be able to give balance sheet as per IFRS also	2		
7.2	Ability to maintain chart of account to assist in accounting of Treasury transactions	2		
7.3	Ability to provide for maintaining and mapping transaction posting rules by entry, role, product, instrument, category, transaction type, currency etc.	2		
7.4	Ability to provide for capture of all financial transactions concurrently for transaction currency and accounting unit currency (local currency)	2		
7.5	Ability to ensure automatic on-line generation of desired GL transaction posting based on defined transaction rules	2		
7.6	Ability to develop a real time interface with other platforms like CBS-Finacle to transfer transaction level data	2		
7.7	Ability to generate accounting entries on trade date and value date/settlement dates for, but not limited to Revaluation of Forex and Valuation of investments. Accruals Provisions Blocked Accounts Suspense Accounts Amortization of premium	2		
7.8	Ability to support concurrent use/application of different accounting practices (e.g. cash vs. accrual, expending vs. deferral, etc) for different nature of transactions to address to: Statutory requirements Internal management accounting policies International Accounting Standards	2		
7.9	Ability to provide portfolio accounting & GL processing / interfacing without affecting operational availability / online access to transactional/ other data	2		
7.10	Ability to conduct end of day or end of month processing without impacting online trading periods / days	2		
7.11	Ability to support ISDA defined business day conventions such as FBD, MFBD, PBD and MPBD for derivatives	2		
7.12	Ability to support AS-11 accounting standards for FOREX transactions and should be capable of migrating to IFRS as defined by RBI	2		
7.13	Ability to maintain FCNR Portfolio as per Bank/RBI Guidelines			
8	Other Processing Requirements	2		

	The proposed solution should have provisions for adequately processing the following subject to market practice and regulatory guidelines. Interest payments Valuations Amortizations	2		
9	The system should facilitate administration, settlement, accounting and revaluation of the following FX Instruments	4		
9.1	Inter-bank FX a. Cash b. Tom c. Spot d. Forward e. Long Term Forward Above should be for standard currency pairs like U.S. Dollar – Rupee / Euro – U.S. Dollar / Pound – U.S. Dollar / U.S. Dollar – Swiss Franc, etc. and also cross currencies like Euro – Rupee / Pound – Rupee, Euro – JPY etc. The above should cover : Outright Buy, Outright Sell, Buy-Sell swaps, Sell-Buy swaps, Last Day Last Day, Delivery Options	2		
9.2	Merchant FX f. Cash g. Tom h. Spot i. Forward j. Long Term Forward Above should be for standard currency pairs like U.S. Dollar – Rupee / Euro – U.S. Dollar / Pound – U.S. Dollar / U.S. Dollar – Swiss Franc, etc. and also cross currencies like Euro – Rupee / Pound – Rupee, etc. The above should cover : Outright Buy, Outright Sell, Buy-Sell swaps, Sell-Buy swaps	2		
10	OTHER PARAMETERS	28		
10.1	Facility to capture Trades through Cryptic methods	2		
10.2	Cryptic Deal Booking and Reversal and should generate correct & complete accounting entries at Treasury & respective B Cat branches	2		
10.3	Facility to put through transactions in Cross Currency deals for any deal type in merchant (FIR/FOR/FBP/Contracts etc.) & interbank	2		
10.4	System should enable to do cross currency deals with any base currency for e.g. a JPY-US\$ deal could	2		

	be booked with JPY as base currency			
10.5	The system should be able to generate a unique number for each deal created	2		
10.6	The system should be able to generate reports/ display of open Forex Currency wise positions at any point of time	2		
10.7	The system should be able to calculate underlying floating interest amount applicable in case of a floating rate Repo transaction	2		
10.8	System should be able to capture Nostro Funds Transfer	2		
10.9	System should allow users to generate card rates based on user definable margins and market rate	2		
10.10	System should allow users to define and modify card rates multiple times during the day	2		
10.11	System should allow users to save the card rates in a TXT format and share with the branches. This file should be as per our upload format as per CBS system/ other systems.	2		
10.12	The system should automatically generate a Rate Scan Report on the basis of external rate feeds or manual feeds	2		
10.13	The system should be capable of carrying automatic validation of deal rates based on Tolerance Limit.	2		
10.14	System should be able to upload FEDAI defined closing Forex rate (Translation Rate) at the end of day into CBS for AS-11 purpose	2		
11	CALCULATIONS AND COMPUTATIONS	16		
11.1	The system should be able to calculate MTM across all currencies	2		
11.2	The system should be able to store historical revaluations for each transaction record	2		
11.3	The system should be able to store historical Forex rates for all currencies	2		
11.4	The system should be able to compute interest and principal repayments for foreign currency loans and support the Interest Reset clause.	2		
11.5	The system should be able to compare foreign currency forecasts from one time to another or to the actual numbers for the same period	2		
11.6	The system should be able to save foreign exchange rates within the system	2		
11.7	Facility to record counterparty confirmation for Interbank and money market deals	2		
11.8	The system should be able to calculate commission on brokers, service tax and tds as per applicable rates.	2		
12	SETTLEMENT AND CONFIRMATION	10		



12.1	Interbank deals should automatically come for settlement on due date	2		
12.2	System should support split settlement of Interbank deals in case of different currency holidays	2		
12.3	The system should have the ability to create a queue for settlement of Interbank deals done through CCIL	2		
12.4	The system should have the ability to create a queue for settlement of Interbank deals done through CLS	2		
12.5	Mail messaging system for customer should be Provided	2		
13	FACILITY FOR MONITORING AND PROVIDING NECESSARY FACILITY TO CAPTURE/ REPORT THE FOLLOWING:	10		
13.1	Due dates for realization	2		
13.2	Compare the actual date of realization with the due date and calculate late/early realization charges/ gains	2		
13.3	Provision to enter charges – system may deduct the amount and realized amount may be credited to branches.	2		
13.4	Forward contracts due dates/ delivery dates/ pickup prompts register	2		
13.5	Due dates for Crystallization /reversals	2		
14.1	SYSTEM SHOULD ALLOW USERS TO DEFINE	22		
14.1.1	Foreign Bills Purchase - Clean Bills Foreign Bills Purchase - Usance Bills Foreign Bills Purchase - Sight Bills Foreign Bills negotiated Foreign Usance Documentary Bills Discounted Merchant Trade Bills : Export/Import Crystallization of Export Bills Deemed Export Bills Export Bill Rediscounted Packing Credit Foreign Currency Loans Any other future requirement similar to the above	2		
14.1.2	Foreign Inward Remittance Foreign Documentary Bills Under Collection Foreign Clean Bills Under Collection Foreign Usance Bills Under Collection Foreign Outward Remittance Foreign Import Bill under Collection Payment under LC Foreign Telegraphic Transfer Foreign Demand Drafts Foreign Travelers Cheque Any other inward / outward remittance like FCNR, EEFC, RFC	2		
14.1.3	Merchant forward contract cancellation charges as per the exchange rate given by the dealer must be	2		

	recovered from/paid to the customer in INR by system generated entries.			
14.1.4	System driven- Early / Late realization charges	2		
14.1.5	FCNRB - Foreign Currency Non Resident (B) Deposit	2		
14.1.6	RFC & RFCTD - Resident Foreign Currency Deposit	2		
14.1.7	FCL - Foreign Currency Loan	2		
14.1.8	FC BORROWINGS	2		
14.1.9	FC BONDS	2		
14.1.10	EEFC & EEFC TD - Exchange Earners' Foreign Currency Account Scheme	2		
14.1.11	In crystallization of Export Bill correct accounting entries to recover/pay the rate difference amount through system should be there.	2		
14.2	DESK WISE – USER REQUIREMENTS			
14.2.1	EXPORT BILLS – COLLECTION	26		
a.	Report for all Export collection bills lodged should be available for 18 months at a stretch	2		
b.	Report for outstanding bills pertaining to Collection and Purchase/Negotiated Bills as on a date for a future date.	2		
c.	Original bill amount and the outstanding (remaining) amounts should be visible in the reports and these reports should be available in currency, party and date wise.	2		
d.	Standard EDCs for the day should be incorporated in the system (on the lines of card rates) and changes in case of special cases should be left to the Authorised Officer.	2		
e.	The mode (Authorise/Modify/Delete) should be visible at all times to the Authorised Officer and If authoriser is in 'Delete' mode, system should prompt (throw a pop up) that the transaction is about to be deleted before deleting.	2		
f.	EEFC should be available for part realisations also and confirmation of recording of date of transaction in EEFC account available	2		
g.	A remarks window to be available and visible always to view any cautionary or other remarks relating to the bill and invariably have the date/time/name of the person putting the remark.	2		
h.	Viewing a particular transaction for reference purpose should be available as a background menu item	2		
i.	System should have a CLOSED Bill marking for those bills in which no payment is expected and such bills should not be there in outstanding report but in a separate report.	2		
j.	System should have a unique transaction id. which enables the user to view the history in all aspects right	2		

	from lodging to closure of a bill.			
k.	Modification of any field should be allowed in all cases of input before authorization	2		
l.	All Forward Contracts should necessarily be booked through customer codes which should be uniform across the branches. Balances in Forward Contracts and EEFC accounts should be available as background menu	2		
m.	An upload of Bills Booking should be enabled through links with FINACLE generated reports	2		
14.2.2	EXPORT BILLS – PURCHASED/NEGAOTITAED	18		
a.	If a forward contract is involved, details of the contract should be visible to the authorizer in the same screen.	2		
b.	The rate should be shown as either the purchase rate/contract rate or the average rate if more than one contract is involved. The name of the party and the premium paid up to date should be correct and visible.	2		
c.	There should be provision for standard EDC rate for the day which should be automatically populated/calculated unless changed by the authorized officer.	2		
d.	The reference no of the bill must only be the branch Ref No and the system reference, if any, should be unique and not named Reference Number but System No	2		
e.	The status of the bill should show distinctly whether it is crystallized or not.	2		
f.	The generation of outstanding bills report ought to be for a particular day on any day if specified (e.g. It should be possible to view outstanding bills on 25.02 out of those outstanding as on 25.01 or any previous date) and it should clearly show the purchased/negotiated amount as well as the remaining amount.	2		
g.	There should always be a REMARKS column visible in which the special/cautionary comments along with the date/time/name of the inserting officer must be present.	2		
h.	There should be a complete record visible for all the changes made in the bills (tenor etc.) with date/time/name of the authorized officer.	2		
i.	System should automatically take TT Selling Rate for FBC /Short realization and TT Buying for any amount of excess realization. Also it should have capability for realization of excess amount under Forward Contract also.	2		
14.2.3	FORWARD CONTRACTS	54		
a.	The system should have the facility to view/authorize forward contract deal inputs by dealers.	2		
b.	Facility to view contract rate (SPOT + PREMIUM)	2		
c.	Facility to view deal time and cancellation time	2		

d.	Facility to view Cancellation rate (SPOT + PREMIUM)	2		
e.	Facility to view party name along with party code	2		
f.	The system should store details like PAN card, mobile number for CCIL reporting (For parties booking contracts 1 mio and above) which needs to be fetched from F.O application	2		
g.	The system should store party's industry type and rating for our use.	2		
h.	Option of assigning CCIL client id and make it visible to us for CCIL reporting (for parties booking contracts 1 mio and above)	2		
i.	EDC Calculation and payment by system at the time of early delivery.	2		
j.	Forward contracts (purchase/sale) outstanding reports on daily basis (Partywise, Branchwise, P/S, currency wise)	2		
k.	MTM daily, monthly, fortnightly at FEDAI rate including currency deals	2		
l.	Generate report as per CCIL requirement (Booked,Util,Canc) for parties booking contracts 1 mio and above	2		
m.	Auto generation of contract note/confirmation and send via email branch wise.	2		
n.	Generate Application and Confirmation received report	2		
o.	Daily sundries and suspense reports	2		
p.	Cancellation and Rebooking, demarcation between rebooking and rollover	2		
q.	Customer profiling including monitoring of limits (contracted method & past performance method), margin, MTM margin for Forward contracts, monitoring tools for contract cancelled under underlying /others/ past performance with a trigger if breached the user defined limit.	2		
r.	Modification of Deals: In case of wrong entries / discrepancies deals to be modified for rectification.	2		
s.	System should support FEDAI Revaluation(or any other method of revaluation proposed by the bank) of Forward Position at user defined frequency and show accounting entries in simulated environment before generating the accounting entries on user acceptance.	2		
t.	System should do calculation and posting of FEDAI Revaluation of outstanding forward contracts/deals on a monthly basis or at the intervals specified by the bank from time to time.	2		
u.	Merchant forward contracts due within spot date for overdue cancellation purpose	2		
v.	Merchant forward contract register between 2 dates	2		
w.	Report of outstanding forward contracts as on date and also between any two dates	2		

x.	Report of forward contracts due for auto cancellation	2		
y.	Auto generation of mail/letter to branches for claim of gain or payment of loss due to cancellation of contract	2		
z.	The system should have the facility to view full transaction details contract wise .	2		
aa.	Report of contracts due as on date	2		
14.2.4	RESOURCES	62		
a.	PCFC( Pre Shipment Credit) – Opening (Export and Import purpose), Modification, Closure, Extension, Delinking, opening using Merchant forwards.	2		
b.	Report of all PCFC Branchwise,Currencywise	2		
c.	Report of Overdue PCFC Branchwise,Currencywise	2		
d.	Report of all PCFC going to be due in next 30 months in the form of a letter to be sent to Branches	2		
e.	FOBD(Post Shipment Credit) Purchase or Opening, Realization(Closure) – Part as well as full, Extension of due date and delinking.	2		
f.	Report of all FOBD bills Branchwise,Currencywise	2		
g.	Report of Overdue FOBD bills Branchwise,Currencywise	2		
h.	Report in the form of a letter to be sent to Branches of all FOBD bills going to become due in next 30 months	2		
i.	EBR(Post Shipment Credit) Purchase or Opening, Realisation(Closure) – Part as well as full, Extension of due date and delinking	2		
j.	Report of all EBR bills Branchwise,Currency wise	2		
k.	Report of Overdue EBR bills Branchwise,Currency wise	2		
l.	Report in the form of a letter to be sent to Branches of all EBR bills going to become due in next 30 months	2		
m.	FCL(Foreign Currency Loan) & FCTL(Foreign Currency Term Loan) – Opening(Export and Import purpose), Modification, Closure, Delinking, closing using Merchant forwards.	2		
n.	Report of all FCL/FCTL Branchwise, Currency wise	2		
o.	Report of Overdue FCL/FCTL Branchwise, Currencywise	2		
p.	Report of all FCL/FCTL going to due in next 30 months in the form of a letter to be sent to Branches	2		
q.	DLFCNR (Demand Loan against FCNR) - Opening(Export and Import purpose), Modification, Closure, Delinking	2		

r.	Report of all DLFCNR Branchwise, Currencywise	2		
s.	Report of Overdue DLFCNR Branchwise, Currencywise	2		
t.	Report of all DLFCNR going to be due in next 30 months in the form of a letter to be sent to Branches.	2		
u.	LOC (Line Of Credit) - Opening, Closure, Payment of Interest monthly, quarterly. Half yearly ,Yearly as per the case	2		
v.	DEPO / INVM(Deposits/Investments) - Opening, Closure, Payment of Interest monthly, quarterly. Half yearly ,Yearly as per the case	2		
w.	LOBORR(Reciprocal Deposits) - Opening, Closure, Payment of Interest on USD as well as INR Leg on monthly, quarterly, half yearly ,Yearly as per the case	2		
x.	FCNR SWAP - Opening, Closure, Payment of Interest on USD as well as INR Leg on monthly, quarterly .Half yearly, Yearly as per the case	2		
y.	Refinance from SIDBI/ NABARD/ EXIM etc	2		
z.	REPORTS: Generation of Daily Asset and Liability statement taking into account previous day balances of INVM/LOC/LOBORR/Swaps etc	2		
aa.	Generation of Weekly Cost and Yield statement taking into account balances of INVM/LOC/LOBORR/Swaps. Also the balances of FCNR Interest in this report should comprise of the FCNR Interest paid amount as well	2		
ab.	Generation of Report of all FCL/FCTL's which are going to mature in the next 90 days	2		
ac.	Generation of Stat 5 Report	2		
ad.	Monthly Revaluation Report	2		
ae.	Monthly amortization report	2		
14.2.5	FCNR & EEFC & Cash Letter	52		
a.	When a FCNR(B) is opened in our system there should be separate flag so as to know number of fresh FCNR(B) opened during particular period.	2		
b.	On maturity of FCNR(B) deposits are renewed by the branch where auto renewal option is not given. Branches send credit @notional rate to us along with details of the FCNR(B) to be renewed. On the basis of information and credit received we are renewing deposits at ours and send credit to branches to enable them to reverse their suspense entry. The auto renewal is being done by the system as such branches come to	2		

	know at the time of quarterly reconciliation. This is routine process and no. of entries is many on day to day basis. Our requirement is that this should be uploaded in the system by extracting details from the CBS.			
c.	At the time of interest payments during the currency of the FCNR (B), there should be provision to keep record of the interest payment along with the facility to view the principal amount, interest paid and interest credited with date.	2		
d.	Provision for calculation of Overdue interest as per RBI guidelines should be there.	2		
e.	Reports showing Fresh FCNR (B) opened excluding Renewal during particular period – Currency wise / Branch wise	2		
f.	Reports showing Fresh FCNR (B) opened including Renewal during particular period. – currency wise / Branch wise	2		
g.	Reports showing Pre-mature Closure of FCNR (B) during particular period. – currency wise / Branch wise	2		
h.	Reports showing Closure of FCNR (B) during particular period. – currency wise / Branch wise	2		
i.	Report Showing Total Outstanding as on particular date – Currency wise / Branch wise showing all the details such as Resource no., Txn. Date, Branch Ref. No. Foreign Currency Amount, period, Value date, Rate of intt. Etc	2		
j.	Statement of account of the branch should be viewed by the branch so that reconciliation with CBS can be done at frequent interval by the branch	2		
k.	All the report should be available in MS-EXCEL, PDF format which can be easily mailed to Branches during the reconciliation.	2		
l.	EEFC accounts should never be overdrawn and show debit balance.	2		
m.	If more than one forward contract to be utilized under one reporting, system is not allowing. There should be provision for such reporting	2		
n.	Statement of account of the branch should be viewed by the branch so that reconciliation with CBS can be done at frequent interval by the branch	2		
o.	In present system while utilization and credit by system on Resource No. is displayed in the statement of account. The correct narration e.g. IMT No. / OMT No. / CBS Account No. should also be displayed in narration	2		

p.	In case of Interest payments in the RFC Saving / RFC Fixed Deposit, there should be a provision in the system for showing principal amount, interest credited amount and interest paid amount with date.	2		
q.	For Cash letters, there should be a facility to mark returning of cheques in the system.	2		
r.	Report of returning of cheques should also be made available	2		
s.	Report for FCNR lodging should be made available.	2		
t.	Report of Outstanding of Collection of cheques ( FOCBC ) should be made available	2		
u.	Report for lodging and realization of cheques for a particular period should be available having details e.g. number of cheques, amount in foreign currency and amount in rupees.	2		
v.	Report of progress for a particular period should be available.	2		
w.	Reports of overdue Purchase bills currency wise.	2		
x.	Reports of Outstanding Purchase bills.	2		
y.	FCNR opening by closing any existing FCNR a/c or vice versa.	2		
z.	Resource revaluation on notional rate change – Vouchers for credit/debit amount to be passed on to our CBS Finacle.	2		
14.2.6	GOLD	16		
a.	Provision for confirmation of trade deals.	2		
b.	Branch wise metal loan register	2		
c.	Reconciliation of stock and loans with branches as well as suppliers	2		
d.	Daily MTM of metal delivered on Unfix basis	2		
e.	Data value in numbers should be allowed up to min five decimal points	2		
f.	Provision for custom duty	2		
g.	Modification of an authorized deal (Change in value date, price of metal and exchange price (FCY-INR) to be permitted) and the modifications are to be recorded and stored so that it could be viewed at any point of time.	2		
h.	Inter branch transfer of stock should be allowed	2		
14.2.7	Currency futures & Interest rate futures	12		
a.	At the front office level, file generated from NSE should be uploaded in the system to maintain cumulative position and various reports like IC-reports/MTM/Profit/loss should be generated through it	4		
b.	Evaluated file from NSE should be inputted in system to cross tally from the front end position. The voucher for daily MTM should be generated through the system.	4		



c.	Passing of necessary vouchers by the system	2		
d.	Daily MTM of Open positions and passing of necessary vouchers	2		
14.2.8	STATEMENT & MIS DESK	66		
14.2.8.1	DAILY REPORTS	14		
	Name of Statement	INPUTS	Subject	
a.	GPB	IC 4, IC 5, IC 6, Map 11, Map 8, Nostro Balance Including Sweep, Gap Report, Depo, Var	GAP, Position and Balance	2
b.	FTD	Daily Pos Data(Back Office Statutory)	Daily Turnover DATA (Merchant and Interbank) of Foreign Exchange	2
c.	Daily GAP(CURRENCY WISE)			2
d.	Structural Liquidity	Map 12, Stl Report	Bucket- wise Asset and Liability of Foreign Currency(in Rs.Lacs)	2
e.	Daily exposure	Net Over Night Open Position (all open forward positions should be discounted to arrive at present value), Counter Party Exposure, Currency Future Exposure , Daily Day Light Single Largest Position, Forward Open Position	NOOP, Day light, Forward open position, Interbank Exposure O/S	2
f.	INTRA DAY LIQUIDITY REPORTS	Inflow And Outflow Of Fund On Different Nostro Accounts On Daily Basis With Time Stamping	AS PER RBI CIR NO 46/21.04.098/ 2014-15	2
g.	DAILY FOREX	Dealer wise profit and turnover data available	The system should enable	2

	TRADING REPORT	for trading deals only.	segregation of profit dealer wise and deal wise: trading, merchant & Arbitrage			
14.2.8.2	WEEKLY REPORTS			4		
a.	Weekly(Assets/Liability)	Statement of Affairs, DEPO/ LOC(India and outside india should be segregated), Mirror Balance Summary, CBS dayrpt 6/3 .	Assets & Liability(In Rs)	2		
b.	Un-reconcilled entries	Unpaid Demand Draft entries	For NDTL calculation for CRR/SLR	2		
14.2.8.3	FORTNIGHTLY REPORTS			8		
a.	BAL Statement	Nostro Balance O/S, INVM, Sweep Balance, Vostro Balance.	Nostro(Country and Currency wise) and Vostro Balance(Country wise) and Balance in EEFC,RFC AND ESCROW A/C s.	2		
b.	Spl. Return VIII(Reporting Friday)	FCI, PCFC, FCTL, Nostro Balance	Balances Held Abroad and Loans in Foreign Currency(In Rs. Crore)	2		
c.	Dynamic Liquidity(Reporting Friday)	Short Term Dynamic Liquidity Report	Short Term Dynamic Liquidity(Estimated)	2		
d.	R Return	R Return		2		
14.2.8.4	MONTHLY REPORTS			30		
a.	Statement of Nostro/Vostro A/Cs	Nostro Balance O/S Currency wise	Nostro/Vostro Balance	2		
b.	MAP/Maturity	IB deals, Asset Liability,	Bucket wise	2		

	y and Position(Last Working Day)	MAP 11,	Assets-Liability Mismatch in GPB,USD,EURO and JPY(Balance Sheet and Off-Balance Sheet Gap)			
c.	Nostro Reconciliation	Unreconciled entries O/s month wise/ Year wise	Summerised Position of Unreconciled Entries in Nostro A/Cs	2		
d.	Unclaimed Deposit and Unreconciled O/S of more than 6 months.	Unreconciled entries for more than 6 months and inoperative entries O/s month wise/ yearwise.	Unclaimed Deposit and Unreconciled O/S of more than 6 months.	2		
e.	Profit/Turnover Statement	Turnover of Merchant Deals (Cash/ TOM/Spot+ Forward), The system should enable segregation of profit dealer wise and deal wise: trading, merchant & Arbitrage	Profit(Exchange Profit, Trading Profit) and Turnover(Merchant,Interbank)	2		
f.	Overseas Foreign Currency Borrowing	Tier I capital of previous quarter is converted into USD by applying RBI reference rate of the last day of the previous quarter, LOC raised for PCFC & Arbitrage purpose.	Overseas Foreign Currency Borrowing	2		
g.	OD Nostro Balance	Debit Balance in any nostro	Date wise OD Nostro Balance	2		
h.	DSB-Last Reporting Friday	MAP 4, Interbank deal register, Yearwise Outstanding Unreconciled Nostro Entries, Statement of Affairs, CARD Rate, Asset Liability, System should support Revaluation of Forward Position at user defined Frequency and Show	O/S Sale-Purchase Contracts,Risk Weighted Assets-Contarts and Derivatives,O/S ECB	2		

		Accounting entries, Capable to mark to market all positions and calculate the profit & Loss				
i.	MAP(DSB X) AND SIR(DSB XI)	MAP 12, Asset liability currency wise, Interbank deal register	Statement of Maturity and Position and Interest Rate Sensitivity	2		
j.	P/L Revenue	Profit/ Loss Statement		2		
k.	Balance Sheet	Statement OF Affairs		2		
l.	True Currency Position	Unreported FEX Transaction for more than INR 1.00 Lac.		2		
m.	ALE/ OSMOS	Outstanding forward Contract / Deals Counter party wise (Inter Bank & Merchant) → Notional Principal, Positive MTM, PFE, Negative MTM. Notional principal& Credit Equivalent of Forward Turnover during the month and Outstanding at the end of the month(Trading Book, Banking Book).		2		
n.	Structural Liquidity	MAP NEW		2		
o.	RCAP	Outstanding forward Contract / Deals Counter party wise (Inter Bank & Merchant) → Notional Principal, Positive MTM, PFE, Negative MTM. Notional principal& Credit Equivalent of Forward Turnover during the month and Outstanding at the end of the month(Trading Book, Banking Book). Counter party Rating		2		
14.2.8. 5	QUARTERLY REPORTS			10		

a.	Transfer of Outstanding Nostro Credit Entries to "Distinct Blocked Account"		Unreconciled Nostro Entries for 3 Years and Above.	2		
b.	Housekeeping		Nostro/Vostro	2		
c.	Country Exposure Risk	Country Wise/ Bank Wise Fund Based(Nostro & INVM) and Non Fund Based(O/S Inter Bank Deals)		2		
d.	Sundry/ Suspense			2		
e.	Country Risk			2		
15	MARK TO MARKET AND REVALUATION:			22		
15.1	Capability to mark to market all positions and calculate the profit & loss			2		
15.2	All forward contracts to be revalued on PV basis			2		
15.3	Arithmetic interpolation to be applied while revaluating the forward contracts			2		
15.4	System should support Revaluation of Forward Position at user defined frequency and show accounting entries in simulated environment before generating the accounting entries on user acceptance			2		
15.5	System should support Revaluation of Nostro Balances at user defined frequency at FEDAI and show accounting entries in simulated environment before generating the accounting entries on user acceptance			2		
15.6	The system should be able to accommodate parallel shift/ nonparallel shift in spot Fx/forward rates for stress testing			2		
15.7	System should support AS-11 accounting and should generate the accounting entries as per the bank's policy			2		
15.8	The system should enable segregation of profits-dealer wise and deal wise :trading, merchant & arbitrage and also to report cost of carrying money market swaps / arbitrage swaps taking user input rate for cost of funds.			2		
15.9	System should generate MTM advice and send the same directly to Merchant via Email			2		
15.10	FCNR . Portfolio. [Banks FC assets and liabilities]			2		

	revaluation as per AS-11. The assets /liabilities pertaining to FCNR to be identified separately from exchange transactions.			
15.11	The system should be able to do Stress test on daily / weekly /monthly /yearly basis for trading book [ including AFS]	2		
16	RECORDS : The system should be able to maintain at least the following records & generate reports accordingly:	36		
16.1	Open positions – Intra-day & overnight	2		
16.2	Currency pair wise Position Book	2		
16.3	Accounting Entries	2		
16.4	Funds Flow	2		
16.5	Gap Statement	2		
16.6	Nostro Ledger	2		
16.7	Deal Register	2		
16.8	Due Date Diary	2		
16.9	Outstanding Deal Register	2		
16.10	Deal Cancellation Register	2		
16.11	Unconfirmed Deal Register	2		
16.12	Overdue Contract Register	2		
16.13	Settled Deal Register	2		
16.14	Maturity Deal Listing	2		
16.15	Maturity list of Lending and Borrowing	2		
16.16	Mark to market of net open positions	2		
16.17	Bills overdue for Delinking	2		
16.18	Forex Turnover in multiple currencies equivalent to any particular currency	2		
17	DEAL CONFIRMATION	16		
17.1	The system should be able to adopt standard confirmation procedures for all products	2		
17.2	The system should provide the flexibility to customize separation between the users of front and back office	2		
17.3	The system should allow for viewing of queue of transactions pending confirmation	2		
17.4	The system should provide ticker listing of all transactions pending settlement or confirmation	2		
17.5	The system should be able to assign tags (confirmed, verified) for trades based on user access level	2		
17.6	The system should have the ability to generate deal confirmation in a format specific to the type of instrument in hard copy as well as in electronic form	2		
17.7	The confirmations generated from the system should be possible for users to send hard copies to counterparties /brokers / issuers	2		
17.8	System should have the ability to unmark deals marked for settlement through CCIL or CLS for Forex	2		

	transactions			
18	PRINTING	6		
18.1	The system should have the ability to print all transaction deal tickets	2		
18.2	Re-printing of transaction deal tickets	2		
18.3	printing of all MIS reports	2		
19	COUNTER PARTY CONFIRMATIONS	8		
19.1	The system should have the ability to accept confirmations from counterparties in electronic format	2		
19.2	The system should be able to reconcile the electronic confirmations received from counter parties for foreign currency denominated transactions	2		
19.3	The system should provide for recording of confirmations received in physical mode from:	4		
19.3.1	Counter-parties	2		
19.3.2	Custodians	2		
20	UNCONFIRMED DEALS	4		
20.1	Segregate and send back to the dealer a particular deal that has not been confirmed for any reason	2		
20.2	Report deals that are not confirmed	2		
21	AUDIT TRAILS	4		
21.1	The system should have the ability to record all modifications and deletions at the trade level	2		
21.2	The system should provide logs for all audit trails to the system administrator in case of Entry/Modification/Deletion, Confirmation & Settlement of Deals, Change of Password, Change of Parameter, Change of User Definition with user details, date & time	2		
22	DEAL SETTLEMENT	8		
22.1	The system should have the ability to create a queue for a definable series for payment release for Securities Transactions	2		
22.2	The system should provide for free text fields to enter manual text for communication purposes between front office and back office	2		
22.3	The system should have the ability to create a table of standing instructions for settlements of foreign currency payments	2		
22.4	The system should have the ability to allow back office users to update the standing instruction table and have changes reflected in all outstanding transactions or as defined by the Bank	2		
23	PAYMENTS	10		
	Ability to generate payment information	2		
	The system should be able to automatically generate payment requests on or before the settlement date	2		

	The system should record the relevant approvals for payments for completed deals for foreign currency transactions	2		
	The system should have the ability to generate letters to counter parties	2		
	The system should have the ability to compute brokerage payable based on the brokerage schedule input in the masters for Forex transactions	2		
24	FOREX BACK OFFICE REPORTS The system should be able to generate at least the following reports:	52		
24.1	R Returns: The consolidated R Return for the Entire Bank is generated by designated branch from CBS system after merging data of all the Forex branches (B Cat), along with treasury branch (A Cat) data which is given manually at present. The R Return for the Treasury branch must be generated and data must be integrated with CBS system for merging of data of all the Forex branches (B Cat), along with treasury branch (A Cat) and generation of consolidated R Returns for the entire Bank at designated centralized CBS Branch.	2		
24.2	IC4, IC5, IC6	2		
24.3	Statement 5 (FCNR Deposits)	2		
	Other Statutory Returns	2		
	Overdraft in Nostro Accounts	2		
	Excess/ overexposure Limit in Nostro Account	2		
	Interbank Gap Analysis	2		
	Due date diary of interbank deals	2		
	Merchant due date diary	2		
	Unconfirmed Interbank Contracts	2		
	Currency wise position statement	2		
	Currency wise outstanding in Investment	2		
	Currency wise outstanding borrowing	2		
	Maturity Profile of Deposits, Investments, Borrowings etc. in respective currencies	2		
	Brokerage reports including the following	2		
	Total trades broker wise (for committed and settled deals)	2		
	Brokerage due/ payment reports	2		
	Turnover status reports	2		
	Positions reports –Deal-wise, Currency-wise, Counterparty wise	2		
	Limits related report	2		
	Separate Fund flow reports for Forex and domestic Transactions	2		



	Deal cancellation report	2		
	Deal amendment report	2		
	Breach reports	2		
	Counter party wise analysis reports	2		
	Instrument wise analysis reports	2		
25	DATA STORAGE	4		
	Data should be stored by the system for at least 10 years	2		
	Users should be able to recall data without any coding requirements	2		
26	MARKET DATA ANALYTICS	6		
	The system should allow users manually define yield curves	2		
	The system should be able to model user-defined treasury curves	2		
	The system should be able to provide trend analysis for market prices of securities	2		
27	COMPUTATIONS AND CALCULATIONS (refer to the calculators section above)	4		
	The system should be able to track the strike dates in case of products with embedded call/put options	2		
	The system should be able to calculate interest for products sensitive to caps and floors	2		
27.3	The system should be able to compute brokerage by any of the following methods as part of deal entry:	6		
27.3.1	Flat brokerage with slabs linked to notional amount / deal type [ cash, spot, forward ]	2		
27.3.2	Percentage rate	2		
27.3.3	In case of FCCBs, ADRs, GDRs and other foreign currency instruments, the system should be able to capture the appropriate foreign exchange rate to reflect the fair value in rupees	2		
29	DEAL CAPTURE	24		
29.1	The system should permit entry of stop loss and take profit limits by deal type / deal size, and also at portfolio level, and also to cap the limits for predefined periods(daily/monthly/quarterly/annually)	2		
29.2	System should be able to record a reverse trade from the take profit or stop loss notification	2		
29.3	The system should be able to compute the exact stop loss and take profit based on pre-defined percentages	2		
29.4	The system should be able to give notifications in case of breach of stop loss/ take profit limits	2		
29.5	The system should be able to compute scrip wise and bucket wise PVB and monitor PVB as a result of every deal at scrip level	2		
29.6	The system should be able to retrieve static data from	2		

	masters at the time of deal entry			
29.7	The system should be able to highlight instances of short sale & covered deals	2		
29.8	The system should be able to stop entry of short sale of securities where such functionality is defined by the user	2		
29.9	The system should allow for the following different types of deal capture:	2		
29.10	Manual deal entry for deals done through brokers and / or wherever, capturing possible, electronically upload the details.	2		
29.11	Automatic deal entry for deals done through dealing Systems	2		
29.12	Facility (option) to put through reverse deals in case of cancellations on the same day	2		
31	LIMITS TO MARKET OPERATIONS	26		
31.1	The system should be able to set and monitor limits based on the following parameters:	2		
31.1.1	Counter party limits	2		
31.1.2	Issuer limits	2		
31.1.3	Currency limits	2		
31.1.4	Dealer limits	2		
31.1.5	Broker limits (only empanelled brokers to be permitted)	2		
31.1.6	Scrip wise limits	2		
31.1.7	Internal limits	2		
31.1.8	Rating limits	2		
31.1.9	Instrument wise limits	2		
31.1.10	Stop loss limits	2		
31.1.11	Take profit limits	2		
31.2	The system should be able to generate alerts in cases where limits are about to be breached based on certain user defined limit amount / trigger amount.	2		
31.3	System should give an option to front office users if they would like to continue with the deal or abort it.	2		
32	VALUATION , AMORTIZATION & NPI (Non Performing Investment)	4		
	Automatic identification of NPI based on user defined rules.	2		
	Posting of partial repayment received in matured accounts or NPI accounts after due date.	2		
33	Ability to maintain versions of every business objects (trade, payments, counterparties, etc) in the system throughout their entire life-cycle	2		
	Ability to fix original trade number with the version	2		

	number incremented each time market events are performed			
34	Ability to specify how strong or weak the links between various trade components in a structured product made up of more than one trade component. Strong links would imply that any market event on any component would be replicated across all components. Conversely, weak linked components will have market events applied independently across all components	6		
34.1	Ability to support P&L reporting across various entities across different timezones.	2		
34.2	Ability to maintain more than one accounting standard for any entity, e.g. Ind AS, GAAP, etc.	4		
	<b>TOTAL</b>	<b>756</b>		

### Products and Instruments Requirement

Sr. No.	Business Process	Max. Marks	S/C	Comments
1	FOREIGN EXCHANGE			
1.1	Following currencies should be available in the system:	2		
	AED,AUD,CAD,CHF,EUR,GBP,HKD, INR ,JPY, SEK,SGD, USD, SAR, DKK, NOK and all other legal currencies required and solution should be able to process transactions pertaining to any two of the above currencies in any order for e.g. USD/JPY & JPY/USD			
1.2	Inter-bank FX	2		
	a. Cash			
	b. Tom			
	c. Spot			
	d. Forward			
1.3	Merchant FX	2		
	a. Cash			
	b. Tom			
	c. Spot			
	d. Forward			
	e. Long Term Forward			
	f. Cancellation and re-booking and roll over			
	g. Capturing of rating of customers as well as PAN Number for forward contract.			
	h. Customer wise limits assigned for booking of forward contracts			

	<p>i. Customer Profiling including monitoring of limits (contracted method &amp; past performance method), margin, MTM margin for Forward contracts, monitoring tools for contract cancelled under underlying /others/ past performance with a trigger if breached the user defined limit.</p> <p>Above should be for standard currency pairs like U.S. Dollar – Rupee / Euro – U.S. Dollar / Pound – U.S. Dollar / U.S. Dollar – Swiss Franc, etc. and also cross currencies like Euro – Rupee / Pound – Rupee, etc.</p> <p>The above should cover :</p> <p>Outright Buy, Outright Sell, Buy-Sell swaps, Sell-Buy swaps</p>			
2	Commodities	2		
2.1	Module for controlling and accounting of commodities like Gold, Silver etc	2		
	<b>TOTAL</b>	<b>8</b>		

#### Derivatives Requirements

Sr. No.	Business Process	Max. Marks	S/C	Comments
1	Exchange Traded Currency futures & options [ including limit, margin maintenance and call facility]	2		
2	Exchange Traded Interest Rate Future	2		
3	<p>Currency Swaps:</p> <p>Cross Currency Swaps (Fixed &amp; Floating) Coupon Swaps (Fixed &amp; Floating) Principal Swaps (Fixed &amp; Floating)</p> <p>Range Accrual swaps</p> <p>Swaps &amp; Forward Rate Agreement</p> <p>With amortization / accreting schedules</p> <p>Swaps with different tenor benchmark, setting &amp; cash flows</p> <p>Basis Swaps</p> <p>In Advance / In Arrears Constant maturity swap Caps and Floors</p> <p>Othe exotic swaps</p>	2		
4	Currency Options:	2		

	Plain Vanilla. European Style, American Style, Bermudan Style Single Barrier, Double Barrier Knock Out, Knock In Window Barrier Average (Asian) Monthly/ Quarterly strip structures Range Forwards & Ratio Range Forwards (Zero Cost Options) Binary options – One Touch/ No Touch Look Back (Fixed and Floating Rate) Compound Option, Chooser Option Forward start Options, Ratchet/ Cliquet Options, Balloon Options Currency Range Accruals Fader Structures Other Exotic Options			
5	Interest Rate Swaps (IRS) Interest rate swaps on different currency curves as defined in the currency master above Indian Interest Rate Swaps OIS (Compounding) INBMK Swaps INCMT Swaps MIFOR Swaps MITOR Swaps MIOIS Swaps	2		
6	Swaptions: Receiver Swaptions Payer Swaptions Forward Start Swaptions	2		
7	Interest Rate Options: Caps Floors Collars Knock out Caps Knock Floors	2		
8	Ability to combine /link different products into one transaction e.g. Currency swap with embedded currency options	2		

9	RANGE OF DERIVATIVE PRODUCTS/ INSTRUMENT TO BE COVERED	96		
9.1	Currency Options	18		
9.1.1	European Options	2		
9.1.2	American Options	4		
9.1.2.1	Exchange Futures	2		
9.1.2.2	Currency futures	2		
9.1.3	Plain Vanilla	2		
9.1.4	Single Barrier (Knock-In / Knock-out) (American / European barrier monitoring)	2		
9.1.5	Double Barrier (Knock-In / Knock-out) (American / European barrier monitoring)	2		
9.1.6	Partial / Window Barrier	2		
9.1.7	Multiple options	2		
9.1.8	Derivative strategies like Ratio Range, Forward Extra, Seagull, Straddle, Butterfly among others	2		
9.1.9	Greeks – Plain vanilla	2		
9.2	Interest Rate Swaps	28		
9.2.1	Plain Vanilla	2		
9.2.2	Basis Swap	2		
9.2.3	Overnight Indexed swap	2		
9.2.4	Amortizing swap	2		
9.2.5	Accretion Swap	4		
9.2.5.1	In Advance / In Arrears	2		
9.2.5.2	Interest Rate Caps / Floors / Collars	2		
9.2.6	Roller-Coaster Swaps	2		
9.2.7	Range-accrual Swaps	2		
9.2.8	Delayed Amortizing Swap	2		
9.2.9	Swaps with Moratorium	2		
9.2.10	Swaps with Bermuda	2		
9.2.11	Swap with Stub:	2		
9.2.12	Stub at start	2		
9.2.13	Stub at end	2		
9.3	Cross Currency Swap	36		
9.3.1	Plain Vanilla	2		
9.3.2	Basis Swap	2		
9.3.3	Principal Only Swaps	2		
9.3.4	Coupon only Swap	2		
9.3.5	Principal + Interest	2		
9.3.6	Exchange at	8		
9.3.6.1	Start	2		
9.3.6.2	End	2		
9.3.6.3	Both	2		
9.3.6.4	Intermediary	2		

9.3.7	Amortizing swap	2		
9.3.8	Accretion Swap	2		
9.3.9	Roller-Coaster Swaps	2		
9.3.10	Delayed Amortizing Swap	2		
9.3.11	Range-accrual Swaps	2		
9.3.12	Swaps with Moratorium	2		
9.3.13	Swaps with Bermuda	6		
9.3.13.1	Swap with Stub:	2		
9.3.13.2	Stub at start	2		
9.3.13.3	Stub at end	2		
9.4	Forward Rate Agreements	6		
9.4.1	Pay Fixed	2		
9.4.2	Pay Floating	2		
9.4.3	Settlement at Start & Settlement at End	2		
9.5	Credit Default Swap	2		
9.6	Other Derivative Products allowed by the Regulators from time to time	2		
10	Front Office activities to be supported	86		
10.1	System should maintain real-time currency position for each dealer.	2		
10.2	System should maintain real-time currency position across dealers.	2		
10.3	Facility to capture derivative deals through user friendly screens.	2		
10.4	Facility to enter Swap deals in cryptic mode for quick capturing	2		
10.5	Standard Settlement Instructions should be automatically defaulted based on deal parameters	2		
10.6	Facility to copy existing deal to generate new deal.	2		
10.7	Facility to mirror existing deal to generate back to back deal.	2		
10.8	System should support generation of deal tickets.	2		
10.9	Facility for stripping of currency options in to multiple options (shortcut feature for deal definition) with change of :	8		
10.9.1	- strike price and	2		
10.9.2	- barrier price and	2		
10.9.3	expiry dates to exact month, quarter, semi-	2		

	annual and annual			
10.9.4	expiry dates to end of month, quarter, semi-annual and annual	2		
10.10	Definition of currency option strategies as templates which can be easily referenced for creation of strategies	2		
10.11	Calculation of Greeks for Currency Options	2		
10.12	System should support pricing of derivative deals at the time of deal entry.	2		
10.13	System should provide standalone screen for pricing of derivative deals with provision to convert the entered parameters to a deal.	2		
10.14	Matching/ Un-matching of back to back Derivative Trades. System should support both full and partial matching of two or more deals.	2		
10.15	Facility to Terminate Derivative Deals. System should compute MTM with a facility to change the system computed MTM amount.	2		
10.16	Monitoring screen to monitor Barrier Currency Option Deals for Knock-In and Knock-Out events.	2		
10.17	Currency Option deals eligible for exercise or lapse should appear automatically on the screen along with important deal information.	2		
10.18	Facility to create structured product encompassing various Currency Option, Principal Swap, IRS and Forward Rate Agreement deals.	2		
10.19	There should be parametric facility for Front Office authorization.	2		
10.20	Computation of interest rate risk like PVBP for Swaps and FRA	2		
10.21	Computation of Delta, Gamma Theta & Rho for Currency Options	2		
10.22	Facility to designate any of the above derivative in to hedge or trading.	2		
10.23	Facility for front office user to manually define the underlying. This should be through a field over and above the "Remarks" field.	2		
10.24	Generation of deal slip and confirmation letter	2		
10.25	Deal slip should contain information of the underlying asset.	2		
10.26	Facility to support a wide range of forex option payoffs with advance model.	2		



10.27	Facility to support Indian, Overseas Fx listed option	2		
10.28	Facility to build linear combined structure products with stripping and solver feature.	2		
10.29	Facility to handle Fx option related market data, especially Fx smile interpolation	2		
10.30	Facility to monitor P& L, position, Greeks and other unique greeks natively and dynamically	2		
10.31	Facility to manage fx option relevant events like exercise and barrier knock for bulk number of options	2		
10.32	Facility to manage the special events in Indian forex option market, like bulk modify the expiry/settlement days due to sudden holiday, modify the settlement type at maturity	2		
10.33	Facility to handle commodity in native module instead of using other asset class proxies.	2		
10.34	Facility to manage different product/location/quality/units etc and aggregate/convert position accordingly.	2		
10.35(a)	Facility to manage full set of commodity listed and OTC products.	2		
10.35(b)	Commodity trading	2		
10.36	Facility to manage embedded IR and FX risks in commodity products in the same manner as IRD and FX desk, therefore a full cross asset solution.	2		
10.37	Facility to handle various equity products: listed and unlisted equities, mutual funds (debt/equity/liquid schemes), preference shares, Initial Public Offering (IPO) subscription and allotment, partly and fully paid venture capital funds, capital advancement and convertible debentures.	2		
10.38	Facility to display average holding cost at portfolio or entity level.	2		
10.39	Facility to handle corporate actions: cash and shares dividends, split and reverse split, merger, spin off, rights offering.	2		
12	BACK OFFICE ACTIVITIES TO BE SUPPORTED	32		
12.1	System should support back office authorization.	2		

12.2	Facility for reset rate entry for Swap and FRA deals on reset date. System should by default display the applicable benchmark rate with provision to change the same before saving the record.	2		
12.3	Facility to change the settlement currency for FRA, Currency Options and Swap deal settlements	2		
12.4	Backdated processing including interest accrual and settlement for backdated swaps.	2		
12.5	Facility to confirm a deal and print the confirmation letter. Ability to view the existing confirmed deals	2		
12.6	Facility to transfer complete deal wise portfolio position from one portfolio to another	2		
12.7	Ability to modify swap parameters like reset date, compounding date and coupon date defined as part of deal entry.	2		
12.8	Facility to change settlement instructions	2		
12.9	System should support Forward Revaluation	2		
12.10	Facility to amortize the MTM in case of termination of deal in "Hedging" portfolio	2		
12.11	Facility to view deal wise MTM across products with facility to view selected deals or portfolios	2		
12.12	Facility to view overall MTM across dealers/ selected dealers by super users	2		
12.13	MTM Trend analysis for any product/ deal - intraday as well as across dates	2		
12.14	System should have capabilities to calculate the following margins : a. Initial margin b. Extreme loss margin c. Calendar Spread margin d. Marked to market	2		
12.15	System should be able to tally daily margins maintenance form: a. Government securities b. Cash c. Other forms	2		
12.16	System should be able to link to the	2		

	respective exchange platform systems: MCX –SX, NSE, BSE, USE, Others			
13	SWIFT CAPABILITIES	18		
13.1	Generation of SWIFT confirmation messages for derivative deals	16		
13.1.1	MT305 - CO Plan Vanilla Confirmation	4		
13.1.2	MT306 - CO Single Barrier Confirmation	4		
13.1.3	MT340 - FRA Confirmation	4		
13.1.4	MT341 - FRA Settlement Confirmation	4		
13.2	System should support reconciliation of inward SWIFT confirmation messages for Derivative deals.	2		
<b>Total Marks</b>		<b>260</b>		

### Technical Requirements

Sr. No.	Business Process	Max. Marks	S/C	Comments
1	Concurrent Use	2		
1.1	The system should be able to support simultaneous use of the system by multiple users	2		
2	Scalability	2		
2.1	The proposed solution should be able to increase or decrease processing resources as per business needs, without the necessity of re-writing code, or undertaking other major efforts	2		
3	Whenever a password for a user login is reset by the application administrator the user should be intimated via his corporate e-mail id through auto generation of email	2		
4	Data Storage and Archiving	10		
4.1	The Proposed Solution should be able to store data for 10 years and during this period, Data recall should not require any additional coding or additional retrieval procedure. The archival and retrieval programs should facilitate easier analysis of old data	4		
4.2	The system should be able to archive transactional database records. Archived data should always be available in the system. The user at all points of time should be able to access and print archived data	2		
4.3	System should support archiving of data that are beyond a specified time horizon. This should be parameterizable	2		
4.4	Export of data to secondary storage device	2		

	should be supported by the system			
5	Documentation	2		
5.1	The system should be able to provide intuitive and current online documentation.	2		
6	File import and export functionality	2		
6.1	The system should have flat file import/export functionality to export transaction data and static data in the following formats Microsoft Excel Format (.XLS/.XLSX) Microsoft Word Format (.DOC/.DOCX) Comma separated values (.CSV) Text file (.TXT), PDF, XML etc	2		
7	Database Security	4		
7.1	The proposed solution should allow users to be controlled (creation, activation, deactivation, deletion etc.) by a specific administrator	2		
7.2	Addition of features should be allowed only through a properly revised upgrade and data migration method	2		
8	SYSTEM SECURITY & SYSTEM ADMINISTRATION	28		
8.1	The system should enable profiling of users and definition of control levels & passwords	2		
8.2	The system should enable creation of different access groups with different access control. Users may belong to multiple group	2		
8.3	Log on to the system should require users to provide unique user identity and form of personal identification e.g. a password	2		
8.4	Bank's Password management features like length and pattern, password encryption, expiry, disabling after unsuccessful attempts, time-out, force password change for events etc.	2		
8.5	System Administration should provide for creation, deletion and modification of users, upgrade users and assigning data access/modification rights of various user groups	2		
8.6	Access only to designated users, and user set-up should be centrally controlled through a specific administration module.	2		
8.7	Maker Checker concept for all type of transactions.	2		
8.8	Generation of detailed audit trails with the	2		

	following minimum features:			
8.9	List of all users logged on to the system	2		
8.10	List of attempted unauthorized logins	2		
8.11	Details of databases accessed and modified by the users.	2		
8.12	Generation of daily audit trails. Separate audit trail for exceptional transactions.	2		
8.13	Provide adequate backup and recovery features.	2		
8.14	Database locking features in the situation that there are multiple accesses and updates on the same record.	2		
	Total Marks	52		

## REPORTS

Sr. No.	Business Process	Max. Marks	S/C	Comments
	REPORTING	20		
1.1	System must come pre-packaged with standard reports that can be modified / customised	2		
1.2	System should support on demand and batch reporting	2		
1.3	System should have the framework to generate regulatory reports and support all required data fields	2		
1.4	System must support GUI based business intelligence tool for configuring reports	2		
1.5	System must interface with enterprise reporting solutions/tools Integration	2		
1.6	System must have support for out-of-the-box connectivity to external systems (trading systems, downstream systems, payment gateways etc) Interface workflows should be configurable	2		
1.7	Interface should support various file formats for Import and Export (CSV, XML, FpML, ASCII etc)	2		
1.8	Ability to integrate custom connectivity	2		
1.9	System should support error handling and notifications for interface and workflow related errors	2		
1.10	System must provide tools for reconciliation of	2		

	data imported/ exported from external systems including SGL Account holding from E-Kuber			
2	Regulatory Reports	60		
2.1	Should include, but not limited to: NOOP : Net outstanding Open Position (including against INR) Intra Day / Day Light limit (including against INR)	2		
2.2	GAP : GPB (Gaps, position and Balance) return	2		
2.3	FTD: Forex Turnover Data	2		
2.4	Counterparty :Exposure Counterparty limit exposure Report	2		
2.5	OFCB : Overseas Foreign Currency Borrowing report	2		
2.6	ALM : Asset Liability Management	2		
2.7	MAP : Maturity And Position	2		
2.8	PPB : Past Performance Basis	2		
2.9	SIR : Statement regarding Interest Rate Sensitivity	2		
2.10	IRSM : Interest Rate Sensitivity Monitor return	2		
2.11	CRAR : Capital Adequacy Return reports IC-4, IC-5, IC-6	2		
2.12	RBI Daily Position summary NORD: Non Option Rupee Derivatives(Monthly/Quarterly)	2		
2.13	SFR II & III : Special Fortnightly Return II & III Section 42, Annex B: Annexure-B of section 42 Banking Regulation Act 1949.	2		
2.14	STAT 5 :Inflow – Outflow of FCNR deposits	2		
2.15	MM Daily return : MM Daily Return to RBI	2		
2.16	Capital Market Exposure (Joint Parliamentary Committee)	2		
2.17	Short sale report	2		
2.18	DSB Monthly/Quarterly	2		
2.19	Risk Weight Asset	2		
2.20	Statutory Reports	2		
2.21	MTM Credit Exposure Report	2		
2.22	Various market risk reports Utilization : Utilization of FCNR funds R Returns IBS Report	2		
2.23	Cross Currency report to RBI	2		
2.24	Option weekly report to RBI	2		
2.25	Interest rate swap	2		

2.26	IRF reports	2		
2.27	IRS client report	2		
2.28	CSGL Report.	2		
2.29	ALCO Report	2		
2.30	Intraday Liquidity statement Fortnightly valuation of SLR securities	2		
3	Report customization	12		
3.1	The system should be able to generate reports based on all available data	2		
3.2	The system should allow reports to be exported into Microsoft Excel, Word, CSV, PDF, XML, XBRL and text format	2		
3.3	The system should be able to provide context sensitive help to guide users	2		
3.4	The system should allow users to present outputs in the form of graphs, charts and other graphic representation	2		
3.5	The system should allow for sorting of data on trader Workstation	2		
3.6	The system should have the ability to isolate and report errors and exceptions	2		
4	Report Coverage	14		
4.1	Ability to generate an output of all accounting entries for a user specified period	2		
4.2	Ability to distinguish between realized and unrealized gain/ loss	2		
4.3	The system should be able to support interest payments in advance and arrears for Interest Rate Swaps	2		
4.4	The system should be able to amortize financial instruments based on straight line method and effective Interest rate method for securities under HTM categories	2		
4.5	Calculation of amortization on HTM categories at weighted average method or FIFO as per Bank's policy	2		
4.6	The system should have the ability to show changes due to exchange rate movements separate from changes in market value	2		
4.7	Frequency of reports can be:	2		

	Daily, Weekly, Fortnightly, Monthly, Quarterly, Half Yearly, Annual, For any given period			
5	Report Formats	8		
5.1	Daily report containing Resources position	2		
5.2	Daily Front Office Transaction Report Dealer-wise, Sanctioning authority wise	2		
5.3	Scheduling of reports	4		
5.3.1	The system should allow for generation of reports on real time basis	2		
5.3.2	Pre-defined reports should be generated with a minimum of user interference	2		
6	Archiving of reports	2		
6.1	The system should archive historical rates extracted from market information systems and should also allow for archiving of historical reports	2		
7	Integration with Enterprise Reporting Solutions/Tools	4		
7.1	System must provide tools for reconciliation of data imported/ exported from external systems	4		
8	The system should have easy report writing facility (Report Writing Tool/Wizard), in the user defined format for generating MIS statements and other adhoc reports. For Internal adhoc MIS and reporting, Officers in the treasury branch should be trained to generate Simple reports.	8		
8.1	Facility to download data from Integrated Treasury Package to Excel Form.	4		
8.2	Soft copy of the reports should be generated in .xls/.doc/.pdf / csv formats	4		
10	Ledger Reports	90		
10.1	Accounts Ledger	2		
10.2	Security Ledger	2		
10.3	Subsidiary General Ledger (SGL)	2		
10.4	Interest Ledger	2		
10.5	Dividend Ledger	2		
10.6	TERM MONEY LEDGER	2		
10.7	Purchase Register	2		
10.8	SALE REGISTER / Short Sale security wise.	2		
10.9	FCNR resources register	2		
10.10	RFCTD Resources register	2		



10.11	Merchant forward contract register	2		
10.12	Contract Register	2		
10.13	Forward suspense register	2		
10.14	Suspense cancellation register	2		
10.15	Suspense reversal register	2		
10.16	Suspense early delivery register	2		
10.17	Outstanding suspense register	2		
10.18	Interbank maturity register	2		
10.19	Interbank deal register	2		
10.20	Repo deal register	2		
10.21	Day Book	2		
10.22	Transaction Scroll	2		
10.23	Any other accounting reports based on the Banks requirements.	2		
10.24	Performance measurement – Dealer wise	2		
10.25	Product – profitability report including money market Swaps	2		
10.26	Date-wise/Instrument-wise Profit During a Period	2		
10.27	Portfoliowise Performance measurement report at user defined frequency or range of period	2		
10.28	Product specific interest rate forecasting	2		
10.29	Product wise/ Portfolio wise Statistical analysis of past performance (Quarterly/Half yearly/Annual – at least 3 corresponding periods)	2		
10.30	Daily return on Call, Notice, Term money, Repo transactions, CBLO	2		
10.31	Average outstanding and yield security / sector / portfolio wise	2		
10.32	Balance sheet value of all securities based on the following classifications: Held to maturity, Held for trading, Available for sale and any other classification as required by the bank.	2		
10.33	Schedule 12, FBD Balance sheet, Basel Returns	2		
10.34	Position reports – Category wise as on any date, comparison between three given dates	2		
10.35	Entity wise (exposure to a company), Scrip-wise, portfolio-wise position as on any date	2		
10.36	Balance Report for any given day	2		

10.37	Funds Position As on	2		
10.38	Weekly statement of Transactions	2		
10.39	Transaction During a Period	2		
10.40	Statement of Term Dynamic Liquidity	2		
10.41	State wise Exposure Report	2		
10.42	Charges statement	2		
10.43	Exceptions Reports During a Day – Grouped for every function Bucketwise outstanding IB/MF contracts Forex Business Turnover report Report on FCS account Daily DAC Report ( Issued / Responded) POB Outstanding report (Department wise) Counterparty limit exposure for MFC (CM/PP) Profit & Loss account Balance sheet FxJV /JV INR module	6		
11	ONLINE DEALERS PAD	82		
11.1	Online Portfolio	2		
11.2	Deal Note	2		
11.3	Deal Notes For a Day	2		
11.4	Deal Tickets	2		
11.5	Deal Ticket – Equity	2		
11.6	Deal Tickets for a date	2		
11.7	Deal Details - Date wise	2		
11.8	Deal Details - Counter Party wise	2		
11.9	Deal Details-Security wise	2		
11.10	Consolidated Deal Details	2		
11.11	Deal Detail Between Two Dates	2		
11.12	Deal Details Value date wise Between Two Dates	2		
11.13	New Consolidated Deal Details	2		
11.14	New Consolidated deal details dealerwise	2		
11.15	Profit Statement-As of Latest Deal	2		
11.16	Category-wise Monthly Profit	2		
11.17	Detail Security Holding	2		
11.18	Branch Wise Holding Summary	2		
11.19	Deal Letter To Branch	2		
11.20	Same Day Same Security Trading	2		
11.21	Miscellaneous Voucher	2		
11.22	Summary Transactions Sheet	2		
11.23	Inter Bank Deal Slip	2		
11.24	Internal Transfer Deal slip	2		
11.25	Merchant Forward Contract Booking Slip	2		
11.26	Inter Bank Swap Deal Slip	2		
11.27	Dealers Pad	2		

11.28	Currency wise position balances	2		
11.29	Funds Flow - Currency wise	2		
11.30	Deal Register	2		
11.31	Termination Register	2		
11.32	Settlement Register	2		
11.33	Portfolio Transfer Register	2		
11.34	Match Register	2		
11.35	Event letter	2		
11.36	MTM Report	2		
11.37	Outstanding Register	2		
11.38	Swap Schedule Register	2		
11.39	Interest Accrual	2		
11.40	Reset Advice	2		
11.41	Mark to market	2		
12	<b>Payment Gate wise (FCTM) Advice Summary</b>	130		
12.1	Account Ledger Interbank maturity register with payment mode (Cash/Settlement (INR)-cross currency)	2		
12.2	Interbank Maturity Report	2		
12.3	Overdue Interest – Age wise	2		
12.4	Overdue Merchant Contract	2		
12.5	Overdue Export Bills / Due for Delinking	2		
12.6	Overdue Foreign Currency Loans	2		
12.7	Profit and Loss statements	2		
12.8	Realized Profit and loss	2		
12.9	Volume and turnover status reports	2		
12.10	Cash flow statements - Daily / Weekly /Monthly/Quarterly/ From-date – to date	2		
12.11	Broker Exposure Transaction wise	2		
12.12	Brokerage paid during a Period-Broker wise	2		
12.13	Broker-wise reports (stating the % of business done)	2		
12.14	FEDAI Revaluation (Daily/Monthly/Quarterly)	2		
12.15	Interbank deal register	2		
12.16	Repo deal register	2		
12.17	Repo deals due date diary	2		
12.18	Unconfirmed forex fwd. Contracts	2		
12.19	Dealers pad	2		
12.20	IB Foreign currency contract confirmation	2		
12.21	R Returns	2		
12.22	R returns currency wise details	2		
12.23	Nostro balances Consolidated Nostro Ledger Statement of Matched Entries on particular day	2		

	Mirror Balance Summary Nostro Balance Summary Reverse Reconciliation O/S Reconciliation entries for One Lac and above as on a particular date Nostro Tracer Letter Reminder letter to the branches for their credit and their debits by default			
12.24	Age wise nostro entries	2		
12.25	Check list for nostro statements	2		
12.26	Age wise analysis of un-reconciled entries from Date To Date	2		
12.27	Reconciliation of o/s nostro entries as on Date	2		
12.28	Inward Remittances Report	2		
12.29	Outward Remittances Report	2		
12.30	FCNR resources register	2		
12.31	FCL resources register	2		
12.32	RFCTD Resources register	2		
12.33	Outstanding FCNR as on a particular date	2		
12.34	Outstanding RFC-TD as on particular date	2		
12.35	Outstanding FCL	2		
12.36	Overdue FCNR	2		
12.37	EEFC/DRFC/DDA ledger branch/customer/currency wise	2		
12.38	RFC ledger branch wise/customer wise/currency wise	2		
12.39	Provision for interest accrued -FCNR	2		
12.40	Provision for interest accrued -RFC TD	2		
12.41	All related reports for FCNR/ RFC deposits controlled under old as well as new accounting system	2		
12.42	Revaluation of FCNR /RFC should be calculated by the system and entries should also be passed by the system.	2		
12.43	Department wise sundry as well as POB head to be maintained.	2		
12.44	Outstanding merchant forward contracts	2		
12.45	Merchant Forward Contracts utilized between 2 dates	2		
12.46	Merchant Forward unconfirmed deals	2		
12.47	-Contract cancellation debit/credit advice and entries of loss / gain there on as per RBI norms.	2		

12.48	Mer. Cont. early delivery and recovery of swap charges / interest on outlay	2		
12.49	Contracts due for delivery of documents	2		
12.50	Merchant forward contracts due within spot date	2		
12.51	Merchant forward contract register between 2 dates	2		
12.52	Contracts due for auto - cancellation	2		
12.53	Merchant forward contract summary	2		
12.54	Merchant contracts overdue	2		
12.55	Contracts cancelled	2		
12.56	Contract Register	2		
12.57	Transaction log	2		
12.58	Forward suspense register	2		
12.59	Suspense cancellation register	2		
12.60	Suspense reversal register	2		
12.61	Suspense early delivery register	2		
12.62	List of transactions maturing between two dates	2		
12.63	Outstanding suspense register	2		
12.64	Crystalized bills report	2		
12.65	Bills to be crystalized	2		
13	REGULATORY REPORTING	104		
13.1	Profit and Loss statements	2		
13.2	Realized Profit and loss	2		
13.3	Projected Interest Accrual based on current portfolio	2		
13.4	Report on overdue redemption on any date (category wise & summary with age wise classification) Statement on Total Interest Income for the Qtr/Half year/ Year– System should generate at quarterly interval a statement with following details a) Interest collected during the quarter/half- year/year b) Add - Interest earned on Sale of Securities during the quarter/half-year/year c) Less – Interest Paid on Purchase of securities during the quarter/half-year/year d) Add – Interest Accrued on Investment upto the last date of the Quarter/Half-Year/Year e) Less – Interest accrued upto the last date of the previous Quarter/Half-Year/Year	2		
13.5	Watch Report (If VaR is increasing over a period)	2		
13.6	Brokerage Paid During a Period-Broker wise	2		
13.7	Brokerage Exposure Statement Broker wise	2		
13.8	Only empanelled brokers should be marked active. Broker wise turnover (amount and percentage vis-à- vis total brokers' turn-	2		

	over) for the financial year should also be provided online			
13.9	Position of investment portfolio should be available online clearly specifying exposure limits vis-a-vis actual maintenance	2		
13.10	Threshold limits (90% of the maximum limits) should be fixed and made available online	2		
13.11	Report should be able to generate Market Risk & Credit Risk charges, Portfolio wise, for the purpose of RAROC.	2		
13.12	Counter party exposure	2		
13.13	Foreign. Currency position-currency wise and summary	2		
13.14	Sources and uses of foreign. Currency funds	2		
13.15	Borrowing maturity pattern-Lending-currency wise	2		
13.16	Borrowing maturity pattern-Borrowing-currency wise	2		
13.17	Currency wise gap scan	2		
13.18	Maturity mismatch currency wise and USD equivalent	2		
13.19	Summary of daily gaps, position and cash balances	2		
13.20	Daily reporting of forex operation	2		
13.21	IC-5 - including net open position of foreign Currency	2		
13.22	Credit risk concentration in derivatives/ forex contracts - Top 10 customers	2		
13.23	Credit risk concentration in derivatives/ forex contracts - Top 10 inter bank	2		
13.24	Bucket wise position of Borrowings in Foreign. Currency	2		
13.25	Capital assessment under Basel – Basel-III	2		
13.26	Qty/ Monthly Forex Review-Forex Turnover	2		
13.27	CAM(Capital Adequacy Monitoring Statement)	2		
13.28	MAP currency wise & consolidated	2		
13.29	SIR currency wise & consolidated	2		
13.30	STAT 5	2		
13.31	BAL Statement	2		
13.32	Cost and yield statements	2		
13.33	Statement of distressed assets	2		

13.34	SFR Statement (Statement of foreign Currency balances held abroad)	2		
13.35	Country exposure report	2		
13.36	Structural liquidity report	2		
13.37	Comparative figures of capital charge as per BASEL – II AND III & IMA guidelines	2		
13.38	Cost & Yield of outstanding BUY / SELL foreign. Currency resources swap	2		
13.39	Cost & Yield on Sources and Uses - foreign. Currency.	2		
13.40	Arbitrage Report 0- between forex and domestic Market	2		
13.41	Daily report on o/s trading swaps - FX	2		
13.42	Daily report on trading profits - Dealer wise / Cy wise	2		
13.43	Report on derivatives showing MTM, booked P & L, PVBP, Accrual, Notional Amount	2		
13.44	Risk Sensitivity Report on Derivatives	2		
13.45	Table Grid on Option Greeks	2		
13.46	Tenor wise distribution of greeks	2		
13.47	Table Grid on option book maturity profile	2		
13.48	Calculation of VAR and back testing	2		
13.49	Simulation Report - Investments	2		
13.50	Statutory Liquidity Requirement (STL) – to be generated for Treasury branch as a whole on daily basis	2		
13.51	Interest Rate Sensitivity Report – to be generated for Treasury branch as a whole on daily basis	2		
13.52	Bucket wise Report of Certificate of Deposits	2		
14	TOTAL SWAP TRADING P/L	64		
14.1	TOTAL CURVE WISE TRADING P/L	2		
14.2	RISK SENSITIVITY REPORT (Bucket wise / Curve wise PV01 distribution as on date)	2		
14.3	GAP REPORT Interest Rate Gap Report (Currency wise – bucket wise)	2		
14.4	TOTAL OPTIONS TRADING P/L	2		
14.5	RISK SENSITIVITY REPORT (Option Greeks, Tenor wise Distribution of Greeks, Simulation, VaR)	2		

14.6	Swaps Sales Activity Report	2		
14.7	CREDIT UTILISATION REPORT	2		
14.8	Total SWAPS SALES P&L REPORT	2		
14.9	Total PRODUCT-WISE SALES P&L REPORT	2		
14.10	REPORT OF TOP CLIENTS	2		
14.11	Total PRODUCT WISE SALES P/L	2		
14.12	Total HEDGE REPORT	2		
14.13	Options Sales Activity Report	2		
14.14	CREDIT UTILISATION REPORT	2		
14.15	Total OPTIONS SALES P&L REPORT	2		
14.16	Total PRODUCT-WISE SALES P&L REPORT	2		
14.17	REPORT OF TOP CLIENTS	2		
14.18	Total OPTIONS SALES P/L	2		
14.19	Total PRODUCT WISE SALES P/L	2		
14.20	Total CLIENT REPORT	2		
14.21	Top 10 Swap Clients	2		
14.22	OPTION MATURITY REPORT	2		
14.23	Hedge Efficiency / Effectiveness Report in respect of all types of Derivative instruments used for Hedging purpose.	2		
14.24	Activity Forecast Register along with ability to compute coupon amount if the rates have been reset for the floating leg	2		
14.25	Deals Slips	2		
14.26	Deals Confirmations	2		
14.27	Interest Rate Reset Notice	2		
14.28	Settlement Notice	2		
14.29	Barrier Trigger Notice	2		
14.30	Shifting of securities as per RBI guidelines.	2		
14.31	Monthly payment of brokerage for bond deals.	2		
14.32	CSGL module should be available and it should strictly comply with RBI guidelines in respect of operational & reporting requirements.	2		
15	MISCELLANEOUS REQUIREMENTS	10		
15.1	Notional rate monitoring	2		
15.2	Sharing of Exchange profit to AD branches on HY basis	2		
15.3	Facility to transfer income & expenditure to CBS on yearly basis	2		
15.4	Platform for rectification of old dated deals	2		
15.5	Option to report manually incase of failure of online reporting of the deals	2		
<b>TOTAL MARKS</b>		<b>612</b>		



Note:

**Technical Bid Evaluation:**

It may be noted that commercial bids will be subjected to following evaluation process:

Only those bidders scoring 70% (70 marks out of 100) or above in the technical evaluation will be only eligible to participate in the next stage of the bidding process (i.e) commercial evaluation

Date: \_\_\_\_\_

Place: \_\_\_\_\_

Signature of Authorized  
Signatory

Name of Signatory:

Designation:

Seal of Company

**RFP for Software Solution for web based application for forex operations****Commercial Bid****To Be submitted in e-Procurement system only**

S. No.	Particulars	Cost (Rs.)
1.	Per User Application Software License Fees (including one year warranty with onsite support for 12 months from the date of live implementation* and Training Cost). (At present approx 80 user licenses would be required)	
2.	Application implementation Cost	
3.	Annual Technical Support per annum To be quoted as 'Total price = (4*price per annum)'	
Grand Total		
	Optional items, if desired by the Bank (To be Negotiated with the L-1 bidder after reverse auction)	
4.	Post Warranty On-Site support (per man month) Rate valid for four years after warranty period.	
5.	Additional customisation charges (T & M Rates) per man month (if required by the bank), beyond SRS.	
6.	Additional training cost (per day training charges per faculty)	

Note:

- (A) L1 Criteria = S.No. 1 + S.No. 2 + S.No. 3
- (B) The bidder has to submit the commercial bid only in the above format. Any other format would be summarily rejected at the time of opening the bid.
- (C) The bidder has to quote for optional items also.
- (D) Software license will be Scalable.
- (E) Bidder shall quote all the figures in numbers followed by in words enclosed in brackets in all commercial bid.
- (F) The Unit Cost should be exclusive of all Taxes.

## ANNEXURE - X

### Proforma for the Bank Guarantee for Earnest Money Deposit

(To be stamped in accordance with stamp act)

Ref: Bank Guarantee # Date

Punjab National Bank

Information Technology Division

5, Sansad Marg

New Delhi 110001

Dear Sir,

In accordance with your bid reference no.

Dated \_\_\_\_\_ M/s \_\_\_\_\_ having its registered office at \_\_\_\_\_ herein after Called 'bidder') wish to participate in the said bid for Software Solution For web based application for forex operations at Punjab National Bank, Information Technology Division, 5 Sansad Marg New Delhi 110001 having its Head Office at 7, Bhikhaiji Cama Place New Delhi 110066.

An irrevocable Financial Bank Guarantee (issued by a nationalized / scheduled commercial Bank) against Earnest Money Deposit amounting to Rs. \_\_\_\_\_ Rupees (in words \_\_\_\_\_) valid up to \_\_\_\_\_ is required to be submitted by the bidder, as a condition for participation in the said bid, which amount is liable to be forfeited on happening of any contingencies mentioned in the bid document.

M/s \_\_\_\_\_ having its registered office at \_\_\_\_\_ has undertaken in pursuance of their offer to Punjab National bank (hereinafter called as the beneficiary) dated \_\_\_\_\_ has expressed its intention to participate in the said bid and in terms thereof has approached us and requested us \_\_\_\_\_ (Name of Bank) \_\_\_\_\_ (Address of Bank) to issue an irrevocable financial Bank Guarantee against Earnest Money Deposit (EMD) amounting to Rs \_\_\_\_\_/- Rupees (in words \_\_\_\_\_) valid up to \_\_\_\_\_.

We, the \_\_\_\_\_ (Name of Bank) \_\_\_\_\_ (Address of Bank) having our Head office at \_\_\_\_\_ therefore Guarantee and undertake to pay immediately on first written demand by Punjab National Bank, the amount Rs. \_\_\_\_\_ Rupees (in words \_\_\_\_\_) without any reservation, protest, demur and recourse in case the bidder fails to Comply with any condition of the bid or any violation against the terms of the bid, Without the beneficiary needing to prove or demonstrate reasons for its such demand. Any Such demand made by said beneficiary shall be conclusive and binding on us irrespective of any dispute or difference raised by the bidder.

This guarantee shall be irrevocable and shall remain valid up to \_\_\_\_\_. If any further extension of this Guarantee is required, the same shall be extended to such

required period on receiving instructions in writing, from Punjab National Bank, on whose behalf guarantee is issued.

"Notwithstanding anything contained herein above

Our liability under this bank guarantee shall not exceed Rs \_\_\_\_\_ Rupees (in words\_\_\_\_\_).

This bank guarantee shall be valid up to \_\_\_\_\_. We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only if you serve upon us a written claim or demand, on or before \_\_\_\_\_ before \_\_\_\_\_ hours (Indian Standard Time) where after it ceases to be in effect in all respects whether or not the original bank guarantee is returned to us."

In witness whereof the Bank, through its authorized officer has set its hand stamped on this

\_\_\_\_\_ Day of \_\_\_\_\_ 2015 at \_\_\_\_\_

Name of signatory

Designation

Bank Common Seal

**PROPOSED HARDWARE SPECIFICATION**

TECHNICAL PLATFORM REQUIREMENT FOR DEPLOYMENT OF THE  
PROPOSED Web Based Application for Forex Operations Solution.

**1. SYSTEM REQUIREMENTS**

S. No.	Item description / configurations/ make /model	Quantity
1.	Operating system	
2.	Database system	
3.	Others (please specify)	

**2. HARDWARE & STORAGE DETAILS**

S. No.	Item description / configurations/ make /model	Quantity
1.		
2.		
3.		
4.		

Date: \_\_\_\_\_

Place: \_\_\_\_\_

Signature of Authorized  
Signatory

Name of Signatory:

Designation:

Seal of Company

**ANNEXURE - XII****CHECK LIST Technical Bid**

S. No.	Documents	Submitted in Bid	
		Online Bid	Physical Bid
1.	Supporting documents in respect of Pre qualification criteria as per Annexure - II		
2.	Bidder's information as per part "I" of Annexure-III.		
3.	Product Information as per part "II" of Annexure –IV.		
4.	Technical features and Technology Architecture as per part 'III' of Annexure – V.		
5.	Acceptance of Compliance Statement Annexure –VII.		
6.	Functional Requirement as per Annexure – VIII.		
7.	Components required for system (Software/ Hardware/ DBMS/ Network Bandwidth/ Software Utilities/ Middleware etc, including Licenses, ATS and AMC wherever required)		
8.	Any other document indicating the feature of the product.		
9.	Proposed Hardware Specification as per Annexure- XI		
10.	Bid Earnest Money in the form of Demand Draft/BG as per Annexure –X. Please mention the tender name with year and company name at the back of DD.		
11.	Proposed Hardware Specification Annexure- XI		
12.	Copy of last three years audited balanced sheet.		
13.	Power of attorney along with Board resolution in favour of authorized person signing the Bid documents.		
14.	Commitment certificate for service support duly signed by the Company Secretary.		
15.	Letter of Undertaking from Principal Solution Provider is to submitted regarding providing adequate support for overseeing and assisting in completing the implementation as stated in point 'h' under <u>Clause 4 i.e. Other conditions.</u>		
16.	All pages of bid documents must be signed by authorized person and all pages of the bid document should be numbered in serial order i.e.1, 2, 3...		

Note: Format for Commercial Bid as per Annexure- IX to be submitted in e-procurement process only. No h Date: \_\_\_\_\_

Date: \_\_\_\_\_

Place: \_\_\_\_\_

Signature of Authorized  
Signatory  
Name of Signatory:  
Designation:  
Seal of Company